

## SCORESHEET

fight (round no.): 2 stage: 2 room: 102 problem no.:

Juror's name & signature: Oudlej Toth

reporter: Presov

opponent: A. SG

reviewer: Ostrava

### REPORTER

Start from 1 and add/subtract

$$1 + 3 + 1 - 1 = 4$$

### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed  | quite detailed, correct                | + results explained                 | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | demonstrative                                   | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |
| 6 | deep and comprehensible, shows physical insight |  |                                     |   |   |                              |                                      |
| 7 |   |  |                                     |   |   |                              |                                      |

### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked
- 1 ..... some incorrect, inconclusive or too long
- 2 ..... deeply incorrect or show deep misconceptions

NOTES:

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 3 + 2 - 0 = 7$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant
- 1 ..... relevant, aimed at resolving unclear points in the report
- 2 ..... + short, apt and clear, well prioritized, all time used

### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | + many correct            | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked
- 1 ..... some incorrect, inconclusive or too long
- 2 ..... deeply incorrect or show deep misconceptions

NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 0.5 + 1 + 1 + 1 \pm 0 - \square = 5$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant
- 1 ..... relevant, meant to clarify unclear points
- 2 ..... + suitably allotted to Rep & Opp, most time used
- 3 ..... + short, apt and clear, well prioritized, time managed efficiently

### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

### MISSED POINTS POINTED OUT

- 1 ..... irrelevant
- 0 ..... none
- 1 ..... relevant, constructive

### ANSWERS TO JURY QUESTIONS

- 0 ..... concise and correct or no questions asked
- 1 ..... some incorrect, inconclusive or too long
- 2 ..... deeply incorrect or show deep misconceptions

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



# SCORESHEET

fight (round no.): 2 stage: 2 room: 102 problem no.: 5

reporter: NINA KIZÁREKOVÁ  
PRESSOV

opponent: SAMUEL JAN  
PAESNIK  
ISG

Juror's name & signature: MATEJ BADIN

reviewer: KLOPECKI  
OSTRAVA

## REPORTER

Start from 1 and add/subtract

$$1 + 2 + 2 - 1 = 4$$

## REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/almost no                                  | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 |   |  |                                     |   |   |                              |                                      |
| 4 | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 5 | detailed demonstrative                          | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 6 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |
| 7 |   |  |                                     |   |   |                              |                                      |

## DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 |                                      |                                      |
| 5 | proved deep understanding            | overall efficient                    |

## ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

## NOTES:

• Helmholtz resonance  
• Formula  $V_{ac} - bL$

Q: Slide 5  
• H1 p(e) [Pa]  
• red orange?

• Amplitude but not frequency

• Teplota vody  
Q: How does the temperature  
• nichlost, vzduch má  
• tlak a tlak

Q: Did you ever investigated frequency in film?  
Q: What was the position of the microphone?  
Q: What is your explanation of decline

## OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 - \square = 6$$

## QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, aimed at resolving unclear points in the report
- 2 + short, apt and clear, well prioritized, all time used

## OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

## DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

## ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

## NOTES:

• different lengths  
[-0.4 Pa] 80 log (0.4)  
[-0.1 Pa] 80 log 4  
40 dB

• CHAOS  
• pressure decline

• inefficient  
• How does f

Q:

## REVIEWER

Start from 1 and add/subtract

$$1 + 0.5 + 0.5 + 1 + 1 \pm \square - \square = 4$$

## QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 0.5 relevant, meant to clarify unclear points
- 1 + suitably allotted to Rep & Opp, most time used
- 2 + short, apt and clear, well prioritized, time managed efficiently

## REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

## REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

## DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

## MISSED POINTS POINTED OUT

| 1 | irrelevant             |
|---|------------------------|
| 0 | none                   |
| 1 | relevant, constructive |

## ANSWERS TO JURY QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

## NOTES:

• flow  
formula  
not exact  
formula

not exact frequency

Please, suitably adjust your grades taking into regard the [1,10] range.

$$\frac{Pa}{\frac{kg}{m^3} \cdot \frac{m^3}{s}} = \frac{\frac{kg \cdot m}{s^2}}{\frac{kg \cdot m^3}{s^3}} = \frac{kg \cdot m^2}{m^3 \cdot s} = \frac{kg \cdot m^2}{m^3 \cdot s}$$



## SCORESHEET

fight (round no.): 2 stage: 2 room: 102 problem no.: 5

Juror's name & signature: FEILHAUER E.H.

reporter: PREŠOV

opponent: 1SG

reviewer: OSTRAVA

### REPORTER

Start from 1 and add/subtract

$$1 + 2 + 2 - 0 = 5$$

### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed demonstrative                          | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |

### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked
- 1 ..... some incorrect, inconclusive or too long
- 2 ..... deeply incorrect or show deep misconceptions

NOTES:

### OPPONENT

Start from 1 and add/subtract

$$1 + 4 + 3 + 2 - 0 = 7$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant
- 1 ..... relevant, aimed at resolving unclear points in the report
- 2 ..... + short, apt and clear, well prioritized, all time used

### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked
- 1 ..... some incorrect, inconclusive or too long
- 2 ..... deeply incorrect or show deep misconceptions

NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 + 1 - 0 - 0 = 5$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant
- 1 ..... relevant, meant to clarify unclear points
- 2 ..... + suitably allotted to Rep & Opp, most time used
- 3 ..... + short, apt and clear, well prioritized, time managed efficiently

### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

### MISSED POINTS POINTED OUT

- 1 ..... irrelevant
- 2 ..... none
- 3 ..... relevant, constructive

### ANSWERS TO JURY QUESTIONS

- 0 ..... concise and correct or no questions asked
- 1 ..... some incorrect, inconclusive or too long
- 2 ..... deeply incorrect or show deep misconceptions

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



## SCORESHEET

### REPORTER

Start from 1 and add/subtract

$$1 + 2 + 1 - \square = 4$$

fight (round no.): 2 stage: 2 room: 102 problem no.:

Juror's name & signature:

reporter: PREJOV

opponent: 1SG BA

reviewer: OSTRAVA

| REPORT  |  |  |   |   |                                |  | DISCUSSION WITH OPPONENT               |                                      | ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS |
|---|--|--|---|---|--------------------------------|--|--|--------------------------------------|---|
| phenomenon explanation                            | theory/model                             | relevant experiments                   | comparison between theory and experiment        | own contribution                            | task fulfilment                | science communication                  | relevant arguments/responses           | reporter's conduct at the discussion |   |
| 0 almost no                                       | 0 almost no                              | 0 too few                              | 0 no/almost no                                  | 0 others' data, incorrectly cited           | 0 misunderstood                | 0 unclear, chaotic                     | 0 too few                              | 0 poor                               | 0 concise and correct or no questions asked         |
| 1 some  | 1 some                                   | 1 some                                 | 1 some  | 1 review of sources, cited                  | 1 partly                       | 1 partly clear                         | 1 some                                 | 1 some aspects fine                  | 1 some incorrect, inconclusive or too long          |
| 2 fair  | 2 fair                                   | 2 fair                                 | 2 not well fitting                              | 2 some own input                            | 2 average                      | 2 average                              | 2 many                                 | 2 good                               | 2 deeply incorrect or show deep misconceptions      |
| 3 good  | 3 good                                   | 3 well performed, sufficient number    | 3 deviations qualitatively analysed             | 3 + some interesting results                | 3 some aspects above average   | 3 some parts well done                 | 3 + data/theory convincingly supported | 3 some aspects efficient             |   |
| 4 detailed  | 4 quite detailed, correct                | 4 + results explained, errors analysed | 4 + theory limits explained, conclusive         | 4 considerable experimental or theoretical  | 4 interesting solution         | 4 overall clear, demonstrative         |  |                                      |   |
| 5 demonstrative                                   | 5 detailed, complex, completely testable | 5 + reproducible, convincing analysis  | 5 well fitting, deviations analysed, conclusive | 5 considerable experimental and theoretical | 5 greater extent than expected | 5 + complex concepts well communicated | 5 proved deep understanding            | 5 overall efficient                  |   |
| 6 deep and comprehensible, shows physical insight |  |  |   |   |                                |  |  |                                      |   |
| 7   |  |  |   |   |                                |  |  |                                      |   |

NOTES:

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 3 + 3 - \square = 8$$

| QUESTIONS ASKED   |   | OPPOSITION (SPEECH)           |                           |                             |                |                   | DISCUSSION WITH REPORTER   |                             |                                      |                | ANSWERS TO JURY and REVIEWER'S QUESTIONS       |
|---|---|-------------------------------|---------------------------|-----------------------------|----------------|-------------------|----------------------------|-----------------------------|--------------------------------------|----------------|--|
|   |   | understanding of presentation | relevant topics addressed | own opinions presented      | prioritisation | time management   | relevant scientific topics | own opinions presented      | opponent's conduct of the discussion | prioritisation |  |
| 0 too few, mostly irrelevant                                | 0 | 0 almost nothing              | 0 no or irrelevant        | 0 too few                   | 0 no           | 0 poor            | 0 almost no                | 0 too few                   | 0 poor                               | 0 no           | 0 concise and correct or no questions asked    |
| 1 relevant, aimed at resolving unclear points in the report | 1 | 1 some main points            | 1 few                     | 1 some                      | 1 some         | 1 reasonable      | 1 few                      | 1 some                      | 1 some aspects fine                  | 1 some         | 1 some incorrect, inconclusive or too long     |
| 2 + short, apt and clear, well prioritized, all time used   | 2 | 2 main points                 | 2 some                    | 2 some correct              | 2 reasonable   | 2 fair            | 2 some                     | 2 some correct              | 2 good                               | 2 reasonable   | 2 deeply incorrect or show deep misconceptions |
|   | 3 | 3 all relevant points         | 3 many                    | 3 many correct              | 3 fair         | 3 efficient       | 3 good                     | 3 many correct              | 3 some aspects efficient             | 3 fair         |  |
|   | 4 | 4 practically all points      | 4 practically all         | 4 + improvement suggestions | 4 very good    | 4 + all time used | 4 new crucial point(s)     | 4 + improvement suggestions | 4 overall efficient                  | 4 very good    |  |

NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 + 1 \pm \square - \square = 5$$

| QUESTIONS ASKED  |   | REVIEW OF REPORT                  |                      |                | REVIEW OF OPPOSITION   |                      |                | DISCUSSION ANALYSIS    |                      | MISSED POINTS POINTED OUT | ANSWERS TO JURY QUESTIONS                      |
|--|---|-----------------------------------|----------------------|----------------|------------------------|----------------------|----------------|------------------------|----------------------|---------------------------|--|
|  |   | report evaluation & understanding | pros & cons          | prioritisation | speech evaluation      | pros & cons          | prioritisation | discussion evaluation  | correct own opinions |                           |  |
| 0 too few, mostly irrelevant   | 0 | 0 poor/wrong                      | 0 irrelevant         | 0 no           | 0 poor/wrong           | 0 irrelevant         | 0 no           | 0 almost no            | 0 too few            | 0 irrelevant              | 0 concise and correct or no questions asked    |
| 1 relevant, meant to clarify unclear points                          | 1 | 1 partial                         | 1 partially relevant | 1 some         | 1 too short/long       | 1 partially relevant | 1 some         | 1 too short/long       | 1 some               | 1 none                    | 1 some incorrect, inconclusive or too long     |
| 2 + suitably allotted to Rep & Opp, most time used                   | 2 | 2 good                            | 2 mostly adequate    | 2 reasonable   | 2 informative, apt     | 2 mostly adequate    | 2 reasonable   | 2 relevant parts       | 2 many               | 2 relevant, constructive  | 2 deeply incorrect or show deep misconceptions |
| 3 + short, apt and clear, well prioritized, time managed efficiently | 3 | 3 detailed, complex               | 3 fully adequate     | 3 good         | 3 condensed & accurate | 3 fully adequate     | 3 good         | 3 accurate, conclusive | 3 fully adequate     |                           |  |

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



# SCORESHEET

fight (round no.): 2

stage: 2

room: 102

problem no.:

Juror's name & signature:

reporter: Preon

opponent: LSG

reviewer: Ashra

## REPORTER

Start from 1 and add/subtract

$$1 + 2 + 1 - 0 = 4$$

## REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed demonstrative                          | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |

## DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

## ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

## OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 25 + 30 - 0 = 57$$

## QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, aimed at resolving unclear points in the report
- 2 + short, apt and clear, well prioritized, all time used

## OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

## DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

## ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

## REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 18 + 1 + 1 - 0 - 0 = 22$$

## QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, meant to clarify unclear points
- 2 + suitably allotted to Rep & Opp, most time used
- 3 + short, apt and clear, well prioritized, time managed efficiently

## REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

## REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

## DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

## MISSED POINTS POINTED OUT

- 1 irrelevant
- 0 none
- 1 relevant, constructive

## ANSWERS TO JURY QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



## SCORESHEET

fight (round no.): 2 stage: 1 room: 102 problem no.: 1 Juror's name & signature: Ondrej Toth  
reporter: Ostrava opponent: Presov reviewer: 1.56

### REPORTER

Start from 1 and add/subtract

$$1 + 1 + 1 - 1 = 2$$

#### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed  | quite detailed, correct                | + results explained                 | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | demonstrative                                   | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |
| 6 | deep and comprehensible, shows physical insight |  |                                     |   |   |                              |                                      |
| 7 |   |  |                                     |   |   |                              |                                      |

#### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

#### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked  
1 ..... some incorrect, inconclusive or too long  
2 ..... deeply incorrect or show deep misconceptions

#### NOTES:

$$E = mc^2 - \text{reponder}$$

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 - 0 = 4$$

#### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant  
1 ..... relevant, aimed at resolving unclear points in the report  
2 ..... + short, apt and clear, well prioritized, all time used

#### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

#### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

#### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked  
1 ..... some incorrect, inconclusive or too long  
2 ..... deeply incorrect or show deep misconceptions

#### NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 1 + 1 + 0 - 0 = 6$$

#### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant  
1 ..... relevant, meant to clarify unclear points  
2 ..... + suitably allotted to Rep & Opp, most time used  
3 ..... + short, apt and clear, well prioritized, time managed efficiently

#### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

#### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

#### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

#### MISSED POINTS POINTED OUT

- 1 ..... irrelevant  
0 ..... none  
1 ..... relevant, constructive

#### ANSWERS TO JURY QUESTIONS

- 0 ..... concise and correct or no questions asked  
1 ..... some incorrect, inconclusive or too long  
2 ..... deeply incorrect or show deep misconceptions

#### NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



fight (round no.): 2 stage: 1 room: 102 problem no.: 1 Juror's name & signature: *Marilyn P. Klein*  
reporter: OSTRAVA opponent: MARTIN FEDORKO reviewer: *HEURICH*  
PRESOV *1. SG*

Start from 1 and add/subtract

$$\boxed{1} + \boxed{1} + \boxed{0} - \boxed{\phantom{0}} = \boxed{2}$$

| phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                                 | task fulfilment              | science communication                |
|---|--|-------------------------------------|---|--|------------------------------|--------------------------------------|
| almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited                  | misunderstood                | unclear, chaotic                     |
| some  | some                                   | some                                | some  | review of sources, cited                         | partly                       | partly clear                         |
| fair  | fair                                   | fair                                | not well fitting                              | some own input                                   | average                      | average                              |
| good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                       | some aspects above average   | some parts well done                 |
| detailed demonstrative                          | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental <u>or</u> theoretical  | interesting solution         | overall clear, demonstrative         |
| deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental <u>and</u> theoretical | greater extent than expected | + complex concepts well communicated |

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 1 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 1 | many                                 | good                                 |
| 2 | + data/theory convincingly supported | some aspects efficient               |
| 3 | proved deep understanding            | overall efficient                    |

0 ..... concise and correct or  
no questions asked

-1 ..... some incorrect,  
inconclusive or too long

-2 ..... deeply incorrect or show  
deep misconceptions

NOTES:

REVIEW OF APPARATUSES

Start from 1 and add/subtract

$$\boxed{1} + \boxed{1} + \boxed{1} + \boxed{1} - \boxed{\phantom{0}} = \boxed{4}$$

0 — too few, mostly irrelevant  
1 — relevant, aimed at resolving unclear points in the report  
2 — + short, apt and clear, well prioritized, all time used

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

0 concise and correct or  
no questions asked

-1 some incorrect,  
inconclusive or too long

-2 deeply incorrect or show  
deep misconceptions

NOTES: • other types  
• AC motor

good points

- missing easy modifications at the setup
- rotor, number of electrodes
- no chimney

- Without Faraday cage
- Number of electrodes
  - higher electrodes when you have higher number of electrodes
- Design of the net

- Reasons why it stop the volaction
- AC/DC
- Only optimum presented: "OK"

Q: action-reaction  
principle with  
electrons

Start from 1 and add/subtract

$$1 + 1 + 2 + 1 + 1 \pm \square - \square = 6$$

- 0 — too few, mostly irrelevant
- relevant, meant to clarify unclear points
- 1 — + suitably allotted to Rep & Opp,  
— most time used
- 2 — + short, apt and clear, well prioritized,  
— time managed efficiently

|   | report evaluation<br>& understanding | pros & cons        | prioritisation |
|---|--------------------------------------|--------------------|----------------|
| 0 | poor/wrong                           | irrelevant         | no             |
| 1 | partial                              | partially relevant | some           |
| 2 | good                                 | mostly adequate    | reasonable     |
| 3 | detailed,<br>complex                 | fully<br>adequate  | good           |

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

|   | discussion<br>evaluation         | correct own<br>opinions |
|---|----------------------------------|-------------------------|
| 0 | almost no                        | too few                 |
| 1 | too short/long<br>relevant parts | some<br>many            |
| 2 | accurate,<br>conclusive          | fully<br>adequate       |

$\times 1$  ..... irrelevant  
 ..... none  
 ..... relevant,  
 ..... constructive

0 ..... concise and correct or  
no questions asked


-1 ..... some incorrect,  
inconclusive or too long

-2 ..... deeply incorrect or show  
deep misconceptions

NOTES:

- core working principle
- relevant parameters
- AC current

Please, suitably adjust your grades taking into regard the [1,10] range.

$E = \frac{V}{d}$    $W = Ve$



## SCORESHEET

### REPORTER

Start from 1 and add/subtract

$$1 + 2 + 1 - 0 = 4$$

fight (round no.): 2 stage: 1 room: 102 problem no.: 1 Juror's name & signature: FELHAUER ERL

reporter: OSTRAVA opponent: PRESOV

reviewer: 156

### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed demonstrative                          | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |

### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked  
 1 ..... some incorrect, inconclusive or too long  
 2 ..... deeply incorrect or show deep misconceptions

NOTES:

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 - 1 = 5$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant  
 1 ..... relevant, aimed at resolving unclear points in the report  
 2 ..... + short, apt and clear, well prioritized, all time used

### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked  
 1 ..... some incorrect, inconclusive or too long  
 2 ..... deeply incorrect or show deep misconceptions

NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 2 + 2 + 2 + 1 - 0 - 1 = 7$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant  
 1 ..... relevant, meant to clarify unclear points  
 2 ..... + suitably allotted to Rep & Opp, most time used  
 3 ..... + short, apt and clear, well prioritized, time managed efficiently

### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

### MISSED POINTS POINTED OUT

- 1 ..... irrelevant  
 2 ..... none  
 3 ..... relevant, constructive

### ANSWERS TO JURY QUESTIONS

- 0 ..... concise and correct or no questions asked  
 1 ..... some incorrect, inconclusive or too long  
 2 ..... deeply incorrect or show deep misconceptions

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



## SCORESHEET

fight (round no.): 2 stage: 1 room: 102 problem no.: 1 Juror's name & signature: KALINAY IC

reporter: OSTRAVA

opponent: PRETOV

reviewer: UG BA

### REPORTER

Start from 1 and add/subtract

$$1 + 2 + 1 - \square = 4$$

### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly average               | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 |   |  | well performed, sufficient number   | deviations                                    | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | good  | good                                   |                                     | qualitatively analysed                        |   |                              |                                      |
| 5 | detailed demonstrative                          | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 6 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |
| 7 |   |  |                                     |   |   |                              |                                      |

### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked  
 1 ..... some incorrect, inconclusive or too long  
 -1 ..... deeply incorrect or show deep misconceptions  
 -2 ..... deeply incorrect or show deep misconceptions

NOTES:

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 3 - \square = 7$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant  
 1 ..... relevant, aimed at resolving unclear points in the report  
 2 ..... + short, apt and clear, well prioritized, all time used

### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked  
 1 ..... some incorrect, inconclusive or too long  
 -1 ..... deeply incorrect or show deep misconceptions  
 -2 ..... deeply incorrect or show deep misconceptions

NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 + 1 \pm \square - \square = 5$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant  
 ..... relevant, meant to clarify unclear points  
 1 ..... + suitably allotted to Rep & Opp, most time used  
 2 ..... + short, apt and clear, well prioritized, time managed efficiently

### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

### MISSED POINTS POINTED OUT

- 1 ..... irrelevant  
 0 ..... none  
 1 ..... relevant, constructive

### ANSWERS TO JURY QUESTIONS

- 0 ..... concise and correct or no questions asked  
 -1 ..... some incorrect, inconclusive or too long  
 -2 ..... deeply incorrect or show deep misconceptions

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



## SCORESHEET

### REPORTER

Start from 1 and add/subtract

$$1 + 1.5 + 1 - 0 = 4$$

fight (round no.): 2

stage: 1

room: 102

problem no.: 1

Juror's name & signature:

reporter: Ashaqa

opponent: Brevor

reviewer: 1SG

| REPORT |   |  |                                     |   |   |                              |                                      | DISCUSSION WITH OPPONENT             |                                      | ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS |  |
|--------|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---|--|
|        | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                | relevant arguments/responses         | reporter's conduct at the discussion |   |  |
| 0      | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     | too few                              | poor                                 | 0   | concise and correct or no questions asked    |
| 1      | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         | some                                 | some aspects fine                    |   |  |
| 2      | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              | many                                 | good                                 |   |  |
| 3      | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 | + data/theory convincingly supported | some aspects efficient               | -1  | some incorrect, inconclusive or too long     |
| 4      | detailed  | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |                                      |                                      |   |  |
| 5      | demonstrative                                   | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated | proved deep understanding            | overall efficient                    | -2  | deeply incorrect or show deep misconceptions |
| 6      | deep and comprehensible, shows physical insight |  |                                     |   |   |                              |                                      |                                      |                                      |   |  |
| 7      |   |  |                                     |   |   |                              |                                      |                                      |                                      |   |  |

NOTES:

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2.5 + 2.5 - 0 = 7$$

| QUESTIONS ASKED |   | OPPOSITION (SPEECH)           |                           |                           |                |                 | DISCUSSION WITH REPORTER   |                           |                                      |                | ANSWERS TO JURY and REVIEWER'S QUESTIONS        |
|-----------------|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|----------------------------|---------------------------|--------------------------------------|----------------|---|
|                 |   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |   |
| 0               | too few, mostly irrelevant                                | almost nothing                | no or irrelevant          | too few                   | no             | poor            | almost no                  | too few                   | poor                                 | no             | 0 concise and correct or no questions asked     |
| 1               | relevant, aimed at resolving unclear points in the report | some main points              | few                       | some                      | some           | reasonable      | few                        | some                      | some aspects fine                    | some           |   |
| 2               | + short, apt and clear, well prioritized, all time used   | main points                   | some                      | some correct              | reasonable     | fair            | some                       | some correct              | good                                 | reasonable     |   |
|                 |   | all relevant points           | many                      | many correct              | fair           | efficient       | good                       | many correct              | some aspects efficient               | fair           |   |
| 3               |   | practically all points        | practically all           | + improvement suggestions | very good      | + all time used | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      | -1 some incorrect, inconclusive or too long     |
| 4               |   |                               |                           |                           |                |                 |                            |                           |                                      |                | -2 deeply incorrect or show deep misconceptions |

NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 + 1 \pm 0 - 0 = 7$$

| QUESTIONS ASKED |  | REVIEW OF REPORT                  |                    |                | REVIEW OF OPPOSITION |                    |                | DISCUSSION ANALYSIS   |                      | MISSED POINTS POINTED OUT                       | ANSWERS TO JURY QUESTIONS                   |
|-----------------|--|-----------------------------------|--------------------|----------------|----------------------|--------------------|----------------|-----------------------|----------------------|---|---|
|                 |  | report evaluation & understanding | pros & cons        | prioritisation | speech evaluation    | pros & cons        | prioritisation | discussion evaluation | correct own opinions |   |   |
| 0               | too few, mostly irrelevant   | poor/wrong                        | irrelevant         | no             | poor/wrong           | irrelevant         | no             | almost no             | too few              | -1 irrelevant                                   | 0 concise and correct or no questions asked |
| 1               | relevant, meant to clarify unclear points                          | partial                           | partially relevant | some           | too short/long       | partially relevant | some           | too short/long        | some                 | 0 none  |   |
| 2               | + suitably allotted to Rep & Opp, most time used                   | good                              | mostly adequate    | reasonable     | informative, apt     | mostly adequate    | reasonable     | relevant parts        | many                 | -1 relevant, constructive                       |   |
| 3               | + short, apt and clear, well prioritized, time managed efficiently | detailed, complex                 | fully adequate     | good           | condensed & accurate | fully adequate     | good           | accurate, conclusive  | fully adequate       | -2 deeply incorrect or show deep misconceptions |   |

NOTES:



## SCORESHEET

fight (round no.): 2

stage: 1

room: 102

problem no.: 13

Juror's name & signature:

Ondrej Toth

reporter: 1.SG

opponent: Ostrava

reviewer: Pucsov

### REPORTER

Start from 1 and add/subtract

$$1 + 4 + 2 - 0 = 7$$

### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                 | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|--------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                              | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                 | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                 | not well fitting                              | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number    | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed demonstrative                          | quite detailed, correct                | + results explained, errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis  | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |

### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

72 dtpia

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 0 - 0 = 4$$

### QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, aimed at resolving unclear points in the report
- 2 + short, apt and clear, well prioritized, all time used

### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 0.5 + 2 + 2 + 1 - 0 = 6$$

### QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, meant to clarify unclear points
- 2 + suitably allotted to Rep & Opp, most time used
- 3 + short, apt and clear, well prioritized, time managed efficiently

### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

### MISSED POINTS POINTED OUT

- 1 irrelevant
- 2 none
- 3 relevant, constructive

### ANSWERS TO JURY QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



## SCORESHEET

fight (round no.): 2 stage: 3 room: 102 problem no.: 13 Juror's name & signature: FEILHAUER Jan  
reporter: 156 opponent: OSTRAVA reviewer: PŘESOV

### REPORTER

Start from 1 and add/subtract

$$1 + 5 + 2 - 0 = 8$$

### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 |   |  |                                     |   |   |                              |                                      |
| 4 | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 5 | detailed demonstrative                          | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 6 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |
| 7 |   |  |                                     |   |   |                              |                                      |

### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 |                                      |                                      |
| 5 | proved deep understanding            | overall efficient                    |

### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked  
-1 ..... some incorrect, inconclusive or too long  
-2 ..... deeply incorrect or show deep misconceptions

### NOTES:

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 1 - 0 = 5$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant  
1 ..... relevant, aimed at resolving unclear points in the report  
2 ..... + short, apt and clear, well prioritized, all time used

### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 ..... concise and correct or no questions asked  
-1 ..... some incorrect, inconclusive or too long  
-2 ..... deeply incorrect or show deep misconceptions

### NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 + 1 - 0 - 0 = 5$$

### QUESTIONS ASKED

- 0 ..... too few, mostly irrelevant  
1 ..... relevant, meant to clarify unclear points  
2 ..... + suitably allotted to Rep & Opp, most time used  
3 ..... + short, apt and clear, well prioritized, time managed efficiently

### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

### MISSED POINTS POINTED OUT

- 1 ..... irrelevant  
0 ..... none  
1 ..... relevant, constructive

### ANSWERS TO JURY QUESTIONS

- 0 ..... concise and correct or no questions asked  
-1 ..... some incorrect, inconclusive or too long  
-2 ..... deeply incorrect or show deep misconceptions

### NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



# SCORESHEET

fight (round no.): 2

stage: 3

room: 102

problem no.: 13

Juror's name & signature: MATEJ BODIN

reporter: BRONO PETRAS  
15G

opponent: OSTRAVA

reviewer: MATEJ KOR  
PRESOV

## REPORTER

Start from 1 and add/subtract

$$1 + 3.5 + 2.0 - \square = 7$$

## REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well-fitting deviations                   | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number   | qualitatively analysed                        | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed demonstrative                          | quite detailed, correct                | + results explained errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |

## DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

## ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES: own content inspired by literature  
• threats per inch

Slide 19  
Accuracy  
Slide 20  
Real number on error bars  
counted by hand

Q: Other types of  
Q: 1200 DPI  
Q: 75  
printing DPI  
limitations of device

Q: How did you measure print  
0 → error bar from exp?

## OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 0 - 0 = 4$$

## QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, aimed at resolving unclear points in the report
- 2 + short, apt and clear, well prioritized, all time used

NOTES:

• area  
• minor error

## OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

## DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

## ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

## REVIEWER

Start from 1 and add/subtract

$$1 + 0.5 + 2.0 + 2.0 + 1 \pm 0 - 0 = 6$$

## QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 0.5 relevant, meant to clarify unclear points
- 1 + suitably allotted to Rep & Opp, most time used
- 2 + short, apt and clear, well prioritized, time managed efficiently

## REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

## REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

## DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

## MISSED POINTS POINTED OUT

- 1 irrelevant
- 0 none
- 1 relevant, constructive

## ANSWERS TO JURY QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:



## SCORESHEET

### REPORTER

Start from 1 and add/subtract

1 + 4 + 2 -  = 7

fight (round no.): 2

stage: 3

room: 102

problem no.: 13

Juror's name & signature: KALINAY

reporter: 156 BA

opponent: OSTRAVA

reviewer: 1250V

### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|-------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                             | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                | not well fitting                              | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number   | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed demonstrative                          | quite detailed, correct                | + results explained                 | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |

### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

### OPPONENT

Start from 1 and add/subtract

1 + 1 + 1 + 1 -  = 4

### QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, aimed at resolving unclear points in the report
- 2 + short, apt and clear, well prioritized, all time used

### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

### REVIEWER

Start from 1 and add/subtract

1 + 1 + 1 + 1 + 1 -  = 5

### QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, meant to clarify unclear points
- 2 + suitably allotted to Rep & Opp, most time used
- 3 + short, apt and clear, well prioritized, time managed efficiently

### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

### MISSED POINTS POINTED OUT

- 1 irrelevant
- 0 none
- 1 relevant, constructive

### ANSWERS TO JURY QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.



## SCORESHEET

fight (round no.): 1

stage: 3

room: 102

problem no.: 13

Juror's name & signature: *Kamran Ali*

reporter: 156

opponent: 9500

reviewer: *Revor*

### REPORTER

Start from 1 and add/subtract

$$1 + 4 + 1.5 - 0 = 6.5$$

#### REPORT

|   | phenomenon explanation                          | theory/model                           | relevant experiments                 | comparison between theory and experiment      | own contribution                          | task fulfilment              | science communication                |
|---|---|--|--------------------------------------|---|---|------------------------------|--------------------------------------|
| 0 | almost no                                       | almost no                              | too few                              | no/ almost no                                 | others' data, incorrectly cited           | misunderstood                | unclear, chaotic                     |
| 1 | some  | some                                   | some                                 | some  | review of sources, cited                  | partly                       | partly clear                         |
| 2 | fair  | fair                                   | fair                                 | not well fitting                              | some own input                            | average                      | average                              |
| 3 | good  | good                                   | well performed, sufficient number    | deviations qualitatively analysed             | + some interesting results                | some aspects above average   | some parts well done                 |
| 4 | detailed, demonstrative                         | quite detailed, correct                | + results explained, errors analysed | + theory limits explained, conclusive         | considerable experimental or theoretical  | interesting solution         | overall clear, demonstrative         |
| 5 | deep and comprehensible, shows physical insight | detailed, complex, completely testable | + reproducible, convincing analysis  | well fitting, deviations analysed, conclusive | considerable experimental and theoretical | greater extent than expected | + complex concepts well communicated |

#### DISCUSSION WITH OPPONENT

|   | relevant arguments/responses         | reporter's conduct at the discussion |
|---|--------------------------------------|--------------------------------------|
| 0 | too few                              | poor                                 |
| 1 | some                                 | some aspects fine                    |
| 2 | many                                 | good                                 |
| 3 | + data/theory convincingly supported | some aspects efficient               |
| 4 | proved deep understanding            | overall efficient                    |

#### ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

### OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 - 0 = 4$$

#### QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, aimed at resolving unclear points in the report
- 2 + short, apt and clear, well prioritized, all time used

#### OPPOSITION (SPEECH)

|   | understanding of presentation | relevant topics addressed | own opinions presented    | prioritisation | time management |
|---|-------------------------------|---------------------------|---------------------------|----------------|-----------------|
| 0 | almost nothing                | no or irrelevant          | too few                   | no             | poor            |
| 1 | some main points              | few                       | some                      | some           | reasonable      |
| 2 | main points                   | some                      | some correct              | reasonable     | fair            |
| 3 | all relevant points           | many                      | many correct              | fair           | efficient       |
| 4 | practically all points        | practically all           | + improvement suggestions | very good      | + all time used |

#### DISCUSSION WITH REPORTER

|   | relevant scientific topics | own opinions presented    | opponent's conduct of the discussion | prioritisation |
|---|----------------------------|---------------------------|--------------------------------------|----------------|
| 0 | almost no                  | too few                   | poor                                 | no             |
| 1 | few                        | some                      | some aspects fine                    | some           |
| 2 | some                       | some correct              | good                                 | reasonable     |
| 3 | good                       | many correct              | some aspects efficient               | fair           |
| 4 | new crucial point(s)       | + improvement suggestions | overall efficient                    | very good      |

#### ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

### REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 + 1 - 0 = 5$$

#### QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, meant to clarify unclear points
- 2 + suitably allotted to Rep & Opp, most time used
- 3 + short, apt and clear, well prioritized, time managed efficiently

#### REVIEW OF REPORT

|   | report evaluation & understanding | pros & cons        | prioritisation |
|---|-----------------------------------|--------------------|----------------|
| 0 | poor/wrong                        | irrelevant         | no             |
| 1 | partial                           | partially relevant | some           |
| 2 | good                              | mostly adequate    | reasonable     |
| 3 | detailed, complex                 | fully adequate     | good           |

#### REVIEW OF OPPOSITION

|   | speech evaluation    | pros & cons        | prioritisation |
|---|----------------------|--------------------|----------------|
| 0 | poor/wrong           | irrelevant         | no             |
| 1 | too short/long       | partially relevant | some           |
| 2 | informative, apt     | mostly adequate    | reasonable     |
| 3 | condensed & accurate | fully adequate     | good           |

#### DISCUSSION ANALYSIS

|   | discussion evaluation | correct own opinions |
|---|-----------------------|----------------------|
| 0 | almost no             | too few              |
| 1 | too short/long        | some                 |
| 2 | relevant parts        | many                 |
| 3 | accurate, conclusive  | fully adequate       |

#### MISSED POINTS POINTED OUT

- 1 irrelevant
- 0 none
- 1 relevant, constructive

#### ANSWERS TO JURY QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES:

Please, suitably adjust your grades taking into regard the [1,10] range.