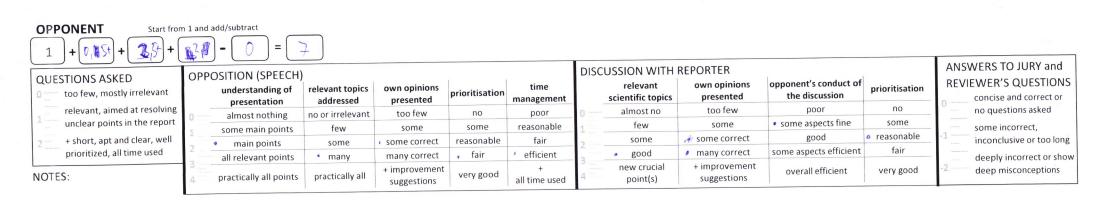


								DISCUSSION WITH OPP	ONENT	ANSWERS TO JUNT,
EPO!	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment		task fulfilment	science communication	relevant arguments/responses	1	OPPONENT, and REVIEWER'S QUESTIONS
	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited		unclear, chaotic	0 too few	poor	
	some	some	some	some	review of sources, cited	partly	partly clear		some aspects fine	concise and correct or
	fair	fair	fair	not well fitting	some own input	average	average	1	good	no questions asked
	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	many + data/theory	some aspects	some incorrect, inconclusive or too long
	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	convincingly supported		deeply incorrect or show
	deen and comprehensible,		+ reproducible,	well fitting, deviations	considerable experimental	greater extent than expected	+ complex concepts well communicated	understanding	overall efficient	deep misconceptions



-	REVIEWER Start from 1 and add/s $1 + 1 + 1 + 1 + 25 + 1$	ubtract		- () = (7								,	
	QUESTIONS ASKED	REV	IEW OF REPO	RT		REV	IEW OF OPPO	SITION		DIS	SCUSSION ANA		MISSED POINTS	ANSWERS TO JURY
	too few, mostly irrelevant	r	eport evaluation & understanding	nros & cons	prioritisation		speech evaluation	pros & cons	prioritisation		discussion evaluation	correct own opinions	POINTED OUT	QUESTIONS concise and correct or
	relevant, meant to clarify unclear points	0	poor/wrong	irrelevant	no	0	poor/wrong	irrelevant	no	0	almost no	too few	" III elevant	no questions asked
. 1	+ suitably allotted to Rep & Opp,	1		partially relevant	some	1	too short/long	partially relevant	some	4	too short/long	some	none	some incorrect,
	most time used	2	good	mostly adequate	reasonable	7	informative, apt	mostly adequate	reasonable		relevant parts	fully	relevant,	inconclusive or too long
Ä	+ short, apt and clear, well prioritized, time managed efficiently	3	detailed, complex	fully adequate	good	3	condensed & accurate	fully adequate	good	2	accurate, conclusive	adequate	constructive	deeply incorrect or show deep misconceptions

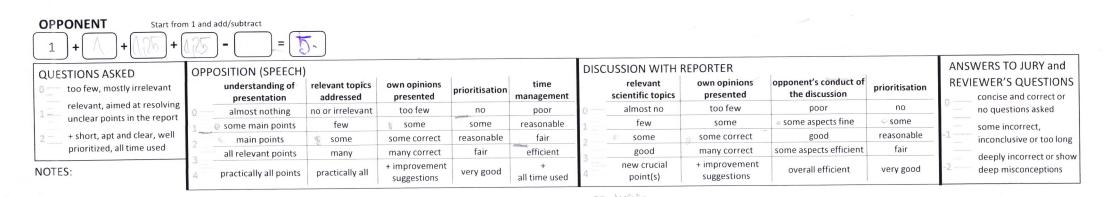
REPO	ORTER Start fro	m 1 and add/subt	ract	fight (round	SCORESHEET fight (round no.): stage: 3 room: 01 problem no.: Juror's name & signature: reviewer: 15 TV reporter: POSTOVA opponent: 67H reviewer: 15 TV							
REPOI	DT.								D	ISCUSSION WITH	OPPONENT	ANSWERS TO JURY,
KEPUI	-1	theory/model	relevant experiments	comparison between theory and experiment	own contrib	ution 1	task fulfilment	science comm		relevant arguments/resp	reporter's conduct at the	OPPONENT, and REVIEWER'S QUESTIONS
0	almost no	almost no	too few	no/ almost no	others' data, inco		misunderstood	unclear, ch		too few	discussion	
1	some	some	some	some	review of sourc		partly	partly cl		some	some aspects fine	concise and correct or
4	fair	fair	fair	not well fitting deviations	some own	input	some aspects	averag some pa	1	many	good	no questions asked
3	good	good	well performed, sufficient number		+ some interesti	ing results	above average	well do		+ data/theo		some incorrect,
C	detailed	quite detailed,	+ results explained		considerable exp		interesting	overall c	lear,	convincingly sup		inconclusive or too long
6	demonstrative	correct	errors analysed	explained, conclusive	or theore		solution	demonstr	2	proved dee	2	deeply incorrect or show
d	eep and comprehensible, d			well fitting, deviations	considerable exp		greater extent	+ complex con communi		understandi	overall efficient	deep misconceptions
4	shows physical insight co	ompletely testab	le convincing analysi	s analysed, conclusive	and theore	etical	than expected	Communi	cateu			
OPP 1	ONENT Start fr	om 1 and add/sub	etract =									
	7 4 4	Lappacition	DN (SDEECH)				DISCUSSI	ION WITH RE	DORTER			ANSWERS TO JURY and
QUES	STIONS ASKED		ON (SPEECH)	vant topics own opinio	ne l	time		relevant	own opinion	opponent's co	duct of	REVIEWER'S QUESTIONS
0	too few, mostly irrelevant			vant topics own opinion	prioritisation	managemen		ntific topics	presented		prioritisation	concise and correct or
	relevant, aimed at resolving	alm		r irrelevant too few	no	poor		lmost no	too few	poor	no	no questions asked
	unclear points in the report	some	main points	few some	some	reasonable	1	few	some	some aspect	s fine some	some incorrect,
2	short, apt and clear, well	2 m	ain points	some corre	ect reasonable	fair		some	some correc		reasonable	inconclusive or too long
	prioritized, all time used	all re	levant points	many many corre	ect fair	efficient	3	good	many correc	1	efficient fair	deeply incorrect or show
NOTES	S:	practi	cally all points pra	ctically all + improven		all time use	g	ew crucial point(s)	+ improveme suggestions	Overall ettic	ient very good	-2 deep misconceptions
				suggestion	15	all time use	u ,	point(s)	suggestions	S		
el.												
REV 1	IEWER Start for	rom 1 and add/sub	± ±	- = =								
					1 25,45,4	/ OF OPPOS	TION		DICCLICCIO		MISSED POINTS	ANSWERS TO JURY
QUE	STIONS ASKED		REVIEW OF REPO	I I	REVIEW	/ OF OPPOS	SITION			ON ANALYSIS		
0	too few, mostly irrelevant	- 1	report evaluation & understanding	nros & cons priori	tisation	speech evaluation	pros & cons	prioritisation		ussion correct ow opinions	POINTED OUT	QUESTIONS concise and correct or
	relevant, meant to clarify u	unclear points	poor/wrong				irrelevant	no		ost no too few	-1 irrelevant	no questions asked
1	+ suitably allotted to Rep 8	с Орр,	partial			oor/wrong				ort/long some	none	some incorrect,
	most time used					1800	partially relevan		4	nt parts many		inconclusive or too long
2	+ short, apt and clear, well	prioritized,	good	, ,			mostly adequate	reasonable		rate, fully	relevant,	deeply incorrect or show
	time managed efficiently	Į:	detailed,	fully adequate	ood 3 co	accurate	fully adequate	good	concl	lusive adequate	constructive	deep misconceptions

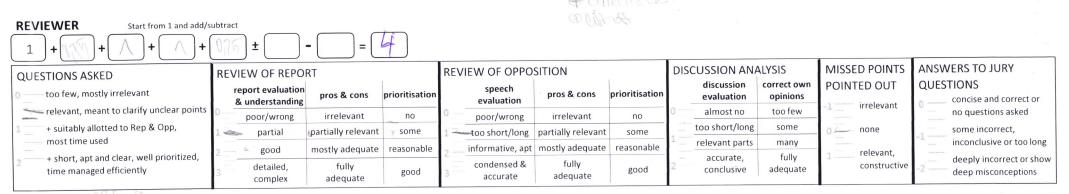
IYPT - March 2019

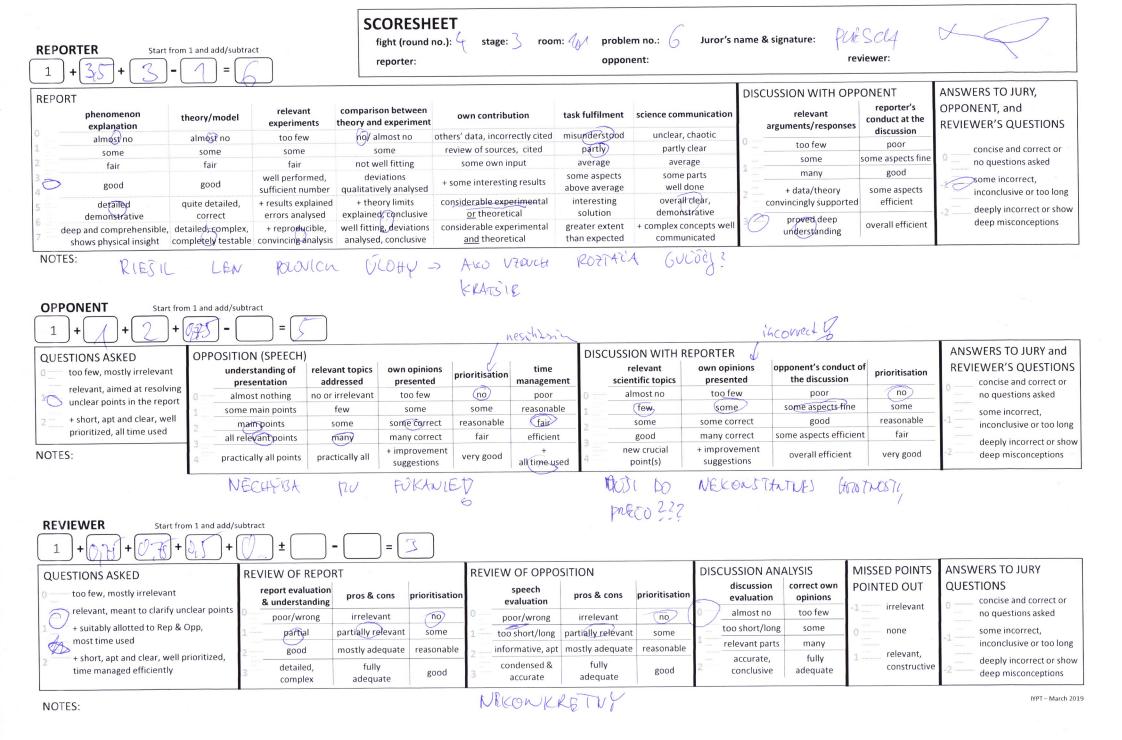
NOTES:



PORT							DISCUSS	ION WITH OPP	ONENT /	ANSWERS TO JURY,
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	argui	relevant ments/responses	reporter's conduct at the discussion	OPPONENT, and REVIEWER'S QUESTIONS
almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0			
some	some	some	some	review of sources, cited		partly clear		too few	poor	concise and correct or
fair	fair	fair	not well fitting	some own input	average	average	4	some	some aspects fine	no questions asked
good	good	well performed,	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done		many + data/theory	good some aspects	some incorrect,
detailed demonstrative	quite detailed,	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	100	ncingly supported	efficient	deeply incorrect or show
deep and comprehensible shows physical insight	e, detailed, complex,	+ reproducible,	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated		understanding	overall efficient	deep misconceptions









comparison between

theory and experiment

no/ almost no

some

not well fitting

deviations

qualitatively analysed

+ theory limits

explained, conclusive

analysed, conclusive

relevant

experiments

too few

some

fair

well performed,

sufficient number

+ results explained

errors analysed

+ reproducible,

others' data, incorrectly cited misunderstood

own contribution

review of sources, cited

some own input

+ some interesting results

considerable experimental

or theoretical

and theoretical

fight (round no.):

stage: 7 room: 10 problem no.: 17

Juror's name & signature:

Swovik
reviewer: GJH

REPORTER Start from 1 and add/subtract =

deep and comprehensible, detailed, complex,

theory/model

almost no

some

fair

good

quite detailed,

correct

shows physical insight completely testable convincing analysis

phenomenon

explanation

almost no

some

fair

good

detailed

demonstrative

reporter: OSTRAVA

well fitting, deviations | considerable experimental

opponent: POSTOVA

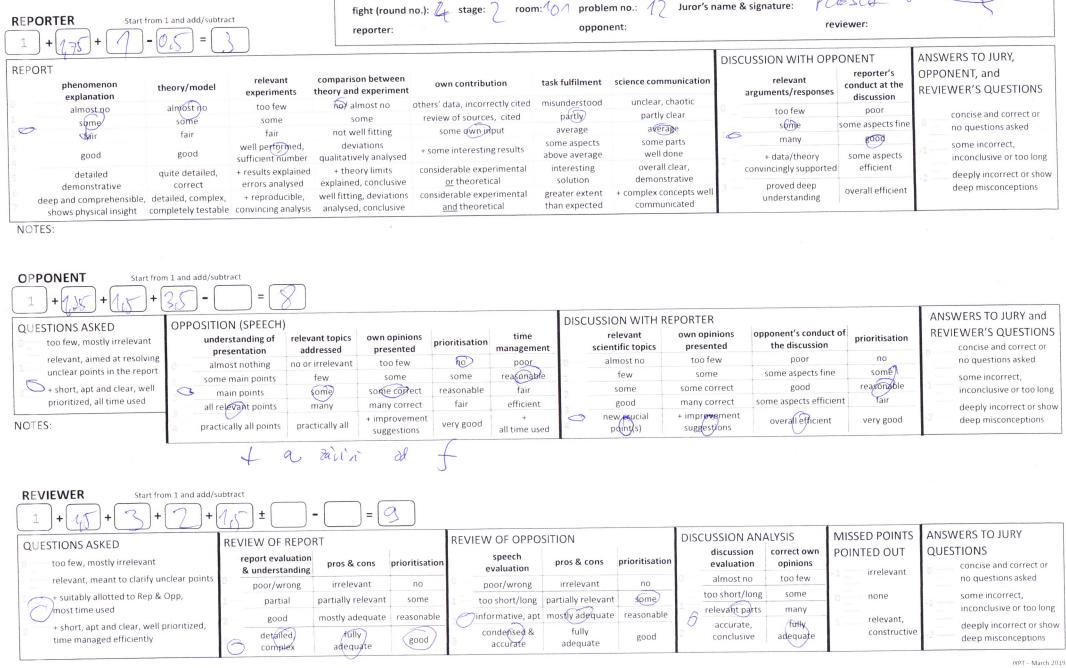
		DIS	CUSSION WITH OPP	ONENT	ANSWERS TO JURY,			
task fulfilment			relevant arguments/responses	reporter's conduct at the	OPPONENT, and REVIEWER'S QUESTIONS			
misunderstood				discussion				
partly	partly clear	·	too few	poor	concise and correct or			
· average	average		some	some aspects fine	no questions asked			
some aspects	• some parts	1	many	good	some incorrect,			
above average	well done		+ data/theory	some aspects	inconclusive or too long			
interesting solution	overall clear, demonstrative			efficient	deeply incorrect or show			
greater extent than expected	+ complex concepts well communicated		proved deep understanding	overall efficient	deep misconceptions			

NOTES:

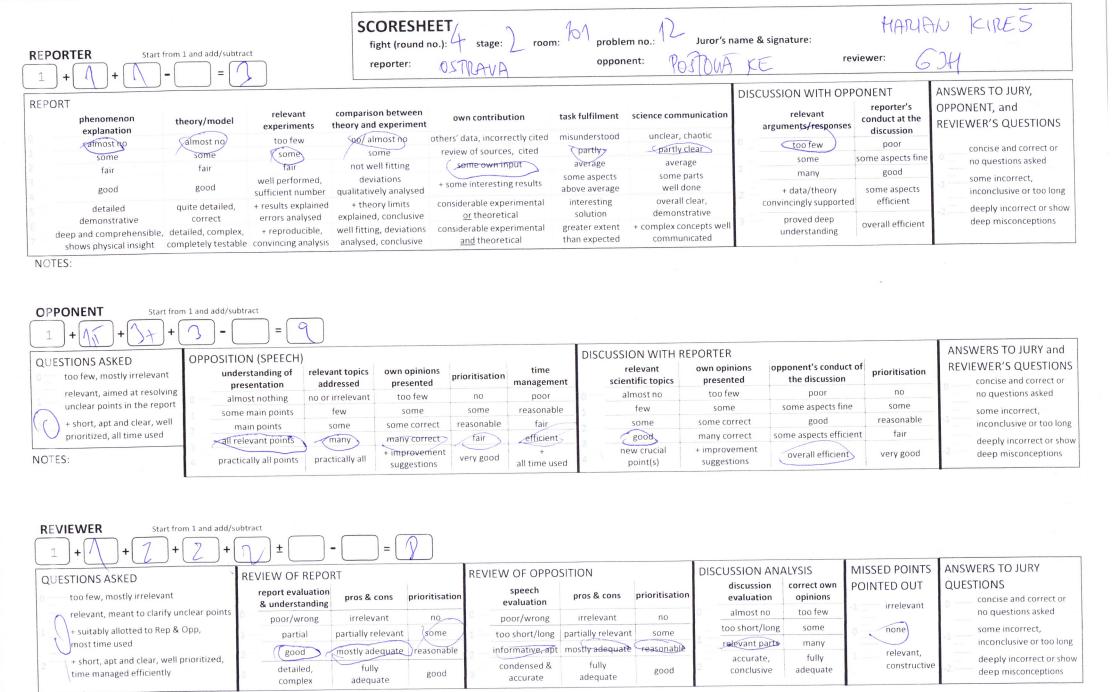
REPORT

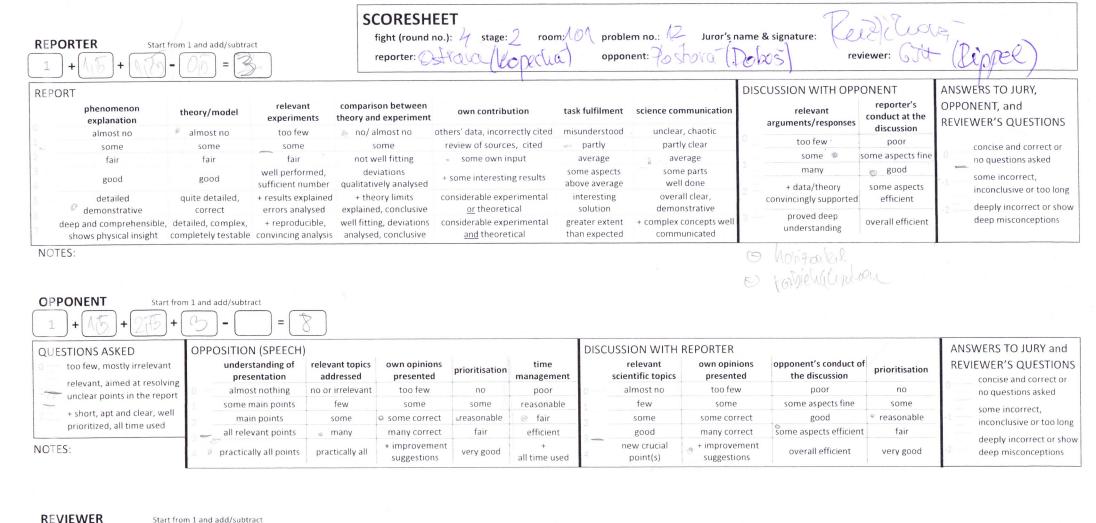
OPPONENT Start from 1 + (5 + 3,5 +	1 and	add/subtract	0				_					
QUESTIONS ASKED	OPP	OSITION (SPEECH)					DISCUSS	SION WITH	REPORTER			ANSWERS TO JURY and
too few, mostly irrelevant		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management		relevant entific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	REVIEWER'S QUESTIONS concise and correct or
relevant, aimed at resolving	0	almost nothing	no or irrelevant	too few	no	poor	0 6	almost no	too few	poor	no	no questions asked
unclear points in the report		some main points	few	some	some	reasonable	1	few	some	some aspects fine	some	some incorrect,
2 + short, apt and clear, well		main points	some	some correct	reasonable	fair	3	some	some correct	good	reasonable	inconclusive or too long
prioritized, all time used	<i>L</i> .	all relevant points	many	many correct	fair	efficient		good	many correct	some aspects efficient	† fair	deeply incorrect or show
NOTES:	3	practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 6 n	new crucial point(s)	+ improvement suggestions		very good	deep misconceptions

RE	VIEWER Start from 1 and add/s	ubtrac	t											
1	+15+25+25+	Nit	<u> </u>	- 0 =	9									
01	ESTIONS ASKED	RE۱	IEW OF REPO	RT		REV	IEW OF OPPO	SITION		DISCUSSION A	IALYSIS	MISSE	D POINTS	ANSWERS TO JURY
0 =	too few, mostly irrelevant		report evaluation & understanding	nros & cons	prioritisation		speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions	POINT	ED OUT	QUESTIONS concise and correct or
	relevant, meant to clarify unclear points	0	poor/wrong	irrelevant	no	0	poor/wrong	irrelevant	no	almost no	too few		IITelevalit	no questions asked
1	+ suitably allotted to Rep & Opp,		partial	partially relevant	some	1		partially relevant	some	too short/lon	g some	0	none	some incorrect,
	smost time used		good	•mostly adequate	reasonable			mostly adequate		relevant part			relevant,	inconclusive or too long
2	+ short, apt and clear, well prioritized, time managed efficiently		detailed,	fully adequate	good	3	condensed & accurate	fully adequate	4 good	accurate, conclusive	fully adequate		constructive	deeply incorrect or show deep misconceptions

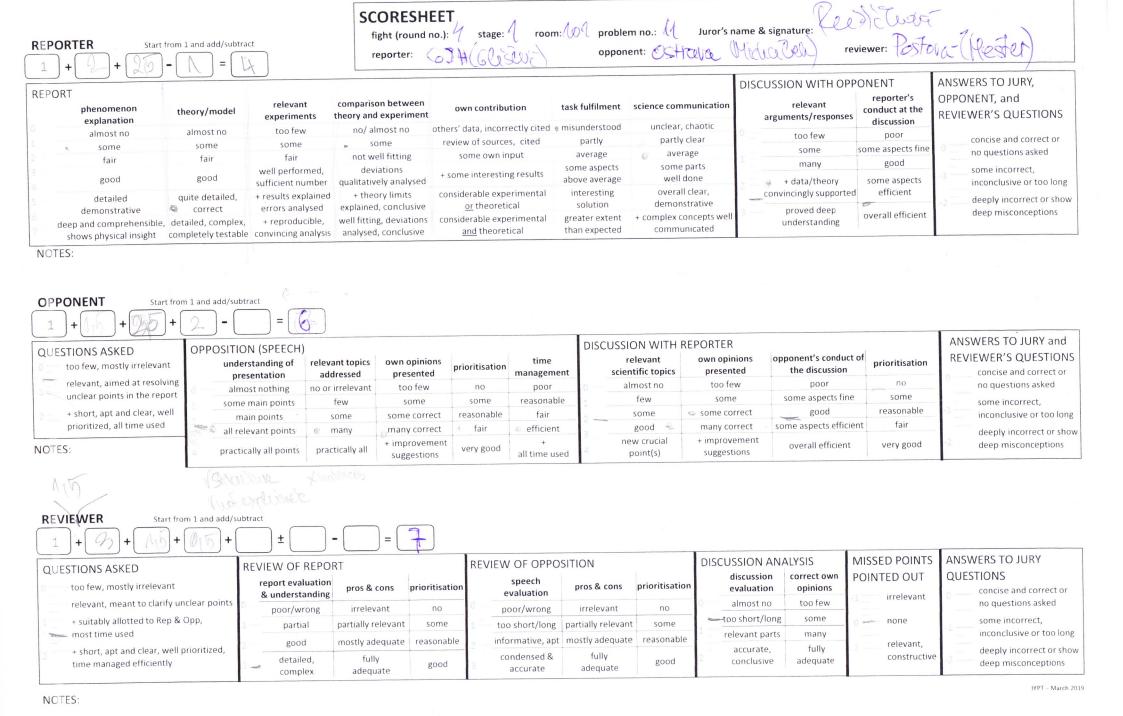


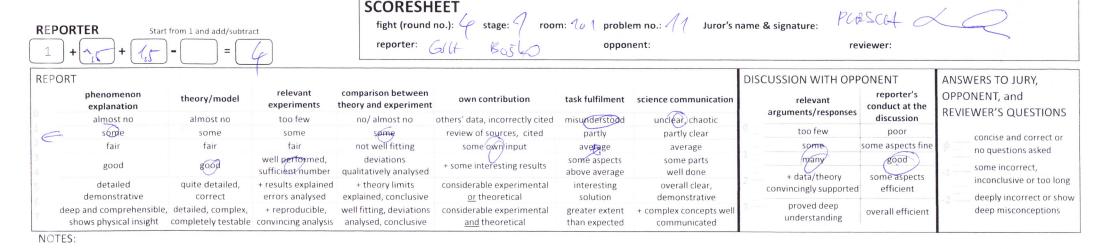
SCORESHEET

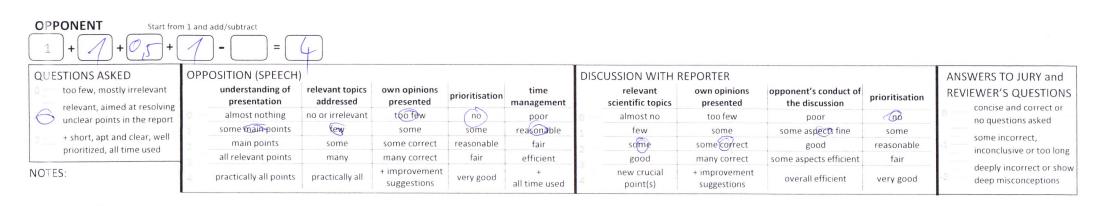


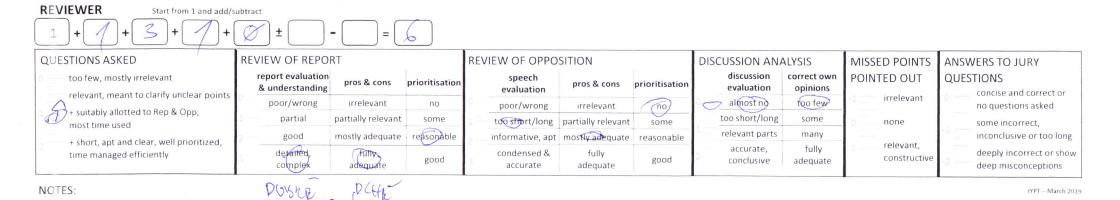


1 + 10 + 70 + 75 +	(189) ±	- () = (9				,	\$		
QUESTIONS ASKED	REVIEW OF REPO	RT		REVIEW OF OPPO	SITION		DISCUSSION ANA	ALYSIS	MISSED POINTS	ANSWERS TO JURY
too few, mostly irrelevant	report evaluation & understanding	nros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		QUESTIONS concise and correct or
relevant, meant to clarify unclear points	poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	almost no	too few	irrelevant	no questions asked
+ suitably allotted to Rep & Opp,	1 partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	o none	some incorrect,
time managed efficiently	good	mostly adequate	reasonable	informative, apt	mostly adequate	reasonable	le @relevant parts	a many		inconclusive or too long
	detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate	relevant, constructive	deeply incorrect or show deep misconceptions











fight (round no.): 4 stage: 1 room: 101 problem no.: 11 Juror's name & signature: Sworick

opponent: 007 PAI/A reviewer: POSTOVA

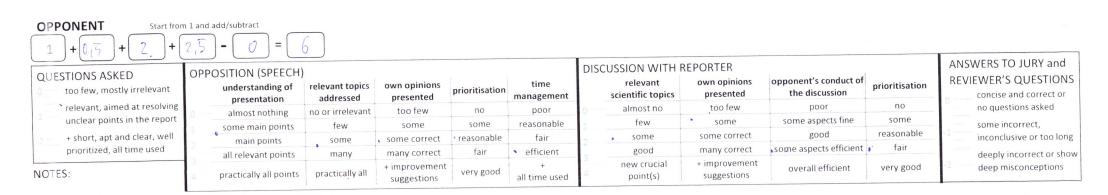
REPORTER Start from 1 and add/subtract 1 + (4) + (2,5) - (1) = (6)

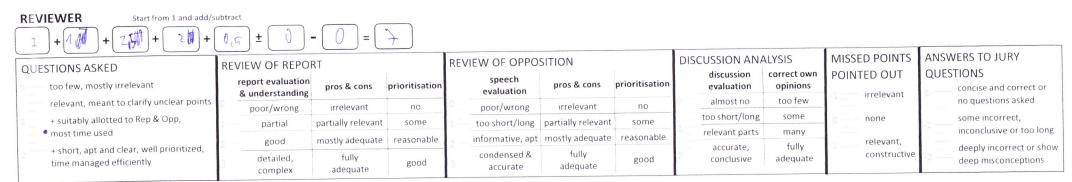
reporter:

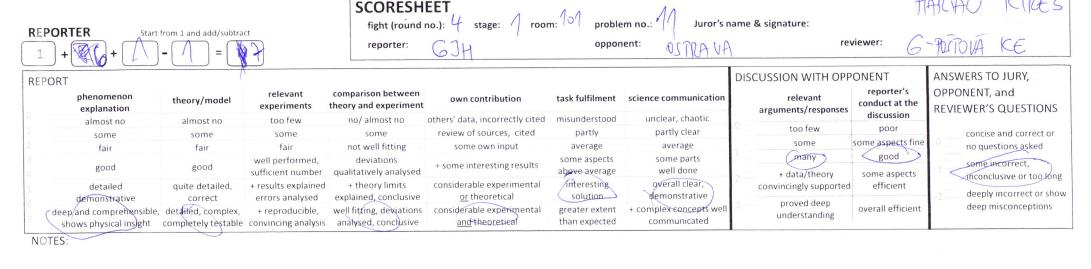
opponent: OSTRAVA

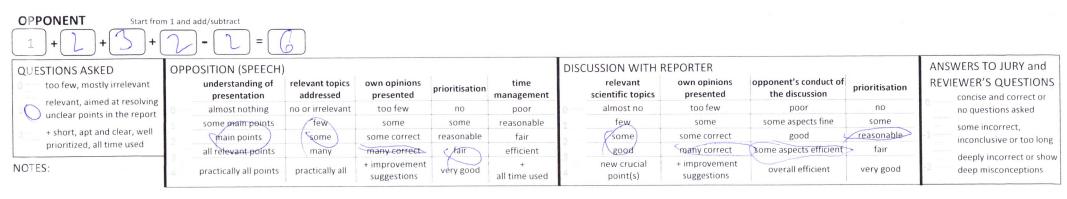
					- Control of the Cont			DISCUSSION WITH OPP	ONENT	ANSWERS TO JURY,
	enomenon planation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	OPPONENT, and REVIEWER'S QUESTIONS
	lmost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	too few	poor	
		some	some	some	review of sources, cited	partly	partly clear			concise and correct or
	some		• fair	not well fitting	some own input	average	average	some	some aspects fine	no questions asked
	fair	fair		deviations		some aspects	some parts	many	good	some incorrect,
*	good	• 0000	well performed, sufficient number	,	+ some interesting results	, above average	well done	+ data/theory	some aspects	inconclusive or too long
8	detailed	9	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	convincingly supported	efficient	deeply incorrect or show
	nonstrative	correct				greater extent	+ complex concepts well	3 proved deep	overall efficient	deep misconceptions
	comprehensible, physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	and theoretical	than expected	communicated	understanding		

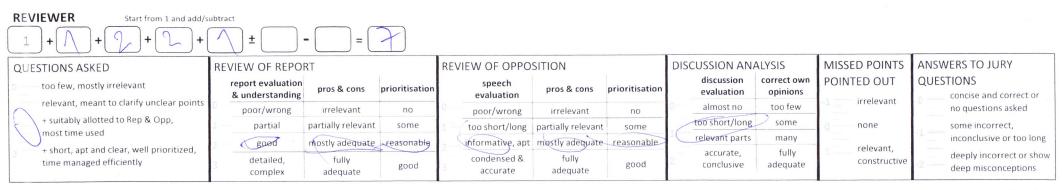
NOTES:













fight (round no.): 4 stage: 3 room: 101 problem no.:

reporter:

opponent:

Juror's name & signature:

#LUBINA



וע	RT						
	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 or theoretical	interesting solution	overall clear, demonstrative
d	eep and comprehensible, shows physical insight	detailed, complex, completely testable	reproducible,	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

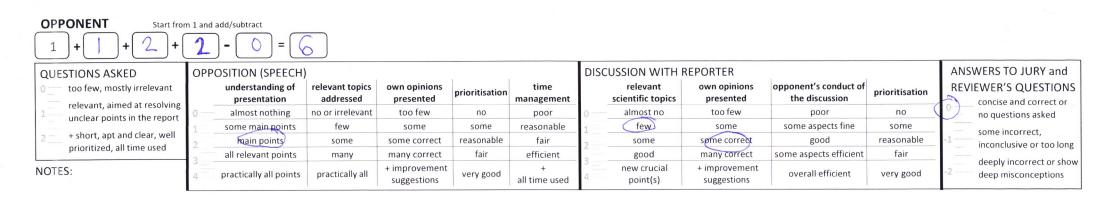
DISCUSSION WITH OPPONENT										
reporter's conduct at the discussion										
poor										
some aspects fine										
good										
some aspects efficient										
overall efficient										

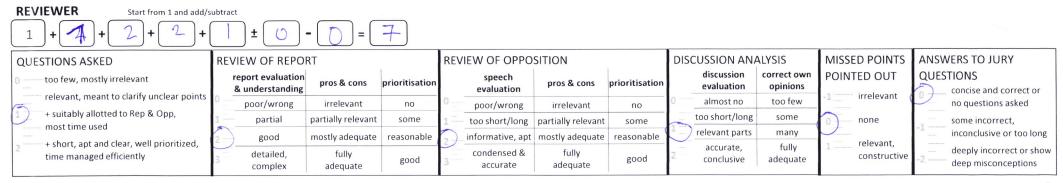
	OPPONENT, and										
REVIEWER'S QUESTIONS											
æ	concise and correct or no questions asked										
	some incorrect, inconclusive or too long										
	deeply incorrect or show										

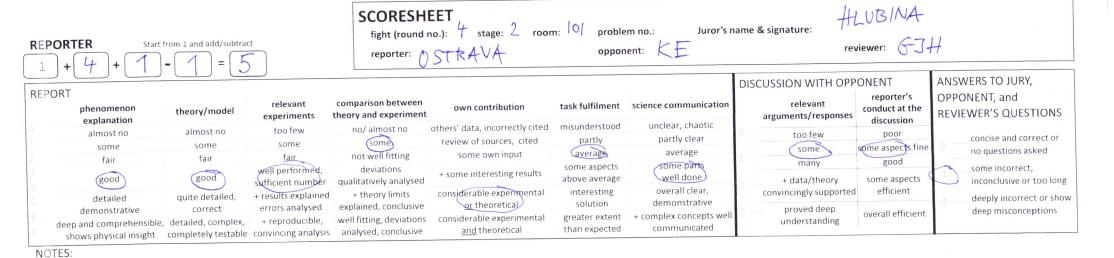
deep misconceptions

ANSWERS TO JURY,

NOTES:

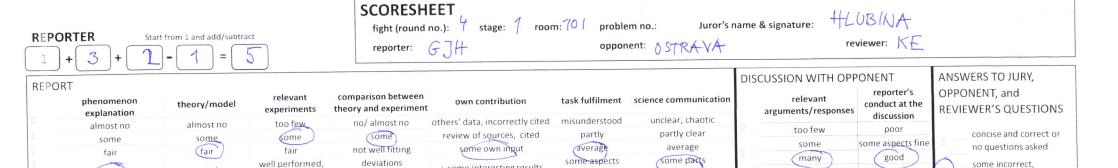






OP PONENT Start from 1 + 2 + 3 +	and add/subtract	O									
OLLESTIONS ASKED	OPPOSITION (SPEECH)					DISC	CUSSION WITH F	REPORTER			ANSWERS TO JURY and
QUESTIONS ASKED too few, mostly irrelevant	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management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

F	REVIEWER Start from 1 and add/s $1 + 1 + 5 + 2 + 2 + 2$	ubtrac		- =	7									
	QUESTIONS ASKED	REV	IEW OF REPO	RT		REV	IEW OF OPPOS	SITION		DISCUSSION ANA				ANSWERS TO JURY
C	too few, mostly irrelevant		report evaluation & understanding		prioritisation		speech evaluation	pros & cons	prioritisation	discussion evaluation	opinions	POIN	rED OUT	QUESTIONS concise and correct or
-	relevant, meant to clarify unclear points	0	poor/wrong	irrelevant	no	0 -	poor/wrong	irrelevant	no	almost no	too few		melevane	no questions asked
1	+ suitably allotted to Rep & Opp,	1	partial	partially relevant	some	1	too short/long	partially relevant	some	too short/long	some	0	none	some incorrect,
1	most time used	2-	good	mostly adequate	reasonable	2	informative, apt	mostly adequate	reasonable	relevant parts	fully	-	relevant,	
V.	 + short, apt and clear, well prioritized, time managed efficiently 	3	detailed, complex	fully adequate	good	3	condensed & accurate	fully adequate	good	accurate, conclusive	adequate		constructive	deeply incorrect or show deep misconceptions



above average

interesting

solution

greater extent

than expected

well done

overall clear,

demonstrative

+ complex concepts well

communicated

some aspects

efficient

overall efficient

inconclusive or too long

deeply incorrect or show

deep misconceptions

+ data/theory

convincingly supported

proved deep

understanding

+ some interesting results

considerable experimental

or theoretical

considerable experimental

and theoretical

NOTES:

good

detailed

demonstrative

shows physical insight

deep and comprehensible, detailed, complex,

good

quite detailed,

correct

completely testable convincing analysis

sufficient number

+ results explained

errors analysed

+ reproducible,

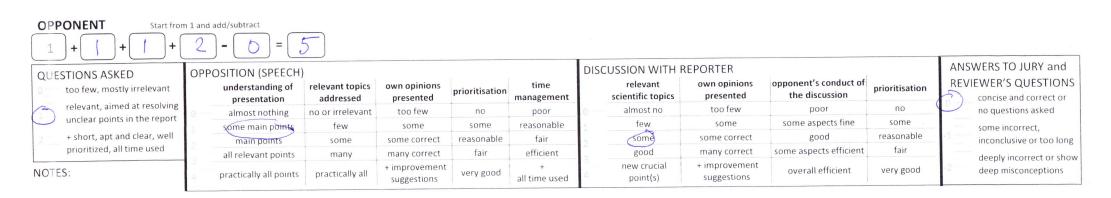
qualitatively analysed

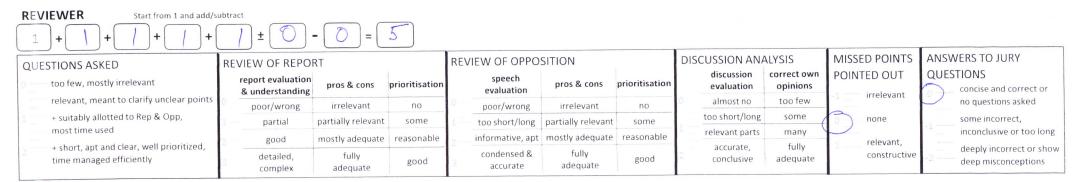
+ theory limits

explained, conclusive

well fitting, deviations

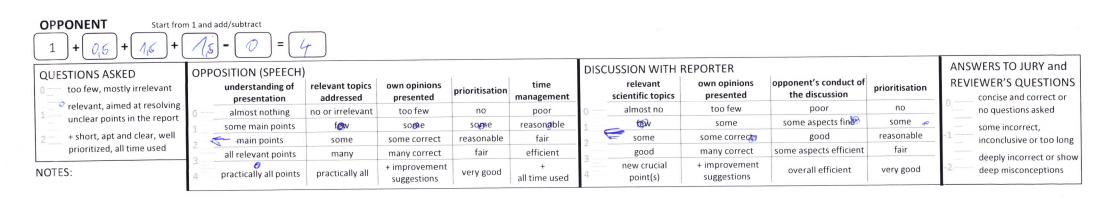
analysed, conclusive

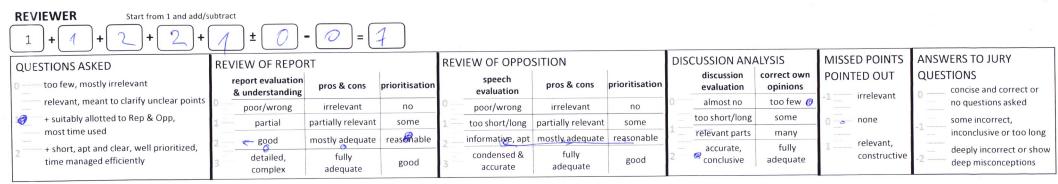






REPORT	Г	1 1						DISCUSSION WITH OPP	ONENT	ANSWERS TO JURY,
REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment		task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	OPPONENT, and REVIEWER'S QUESTIONS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







reporter:

OSTRAVA

opponent: Poctor

fight (round no.): 4 stage: 2 room: 101 problem no.: 12 Juror's name & signature:

HEILIPGER Ment

reviewer: 63H

REPORTER Start from 1 and add/subtract

POR	phenomenon	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
	explanation				others' data, incorrectly cited	misunderstood	unclear, chaotic
	almost no	almost no	too few	no/ almost no			
	some	some	some	ø some	review of sources, cited	partly	partly clear
-	fair	o 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 or theoretical	interesting solution	overall clear, demonstrative
	eep 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 we communicated

DIS	CUSSION WITH OPP	ONENT
	relevant arguments/responses	reporter's conduct at the discussion
	too few	poor
	some	some aspects fine
	many	good
	+ data/theory convincingly supported	some aspects efficient
	proved deep understanding	overall efficient

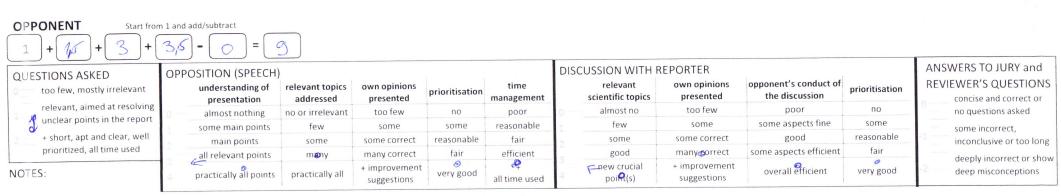
	OPPONENT, and
	REVIEWER'S QUESTIONS
ie	concise and correct or no questions asked
	some incorrect, inconclusive or too long
	deeply incorrect or show

deep misconceptions

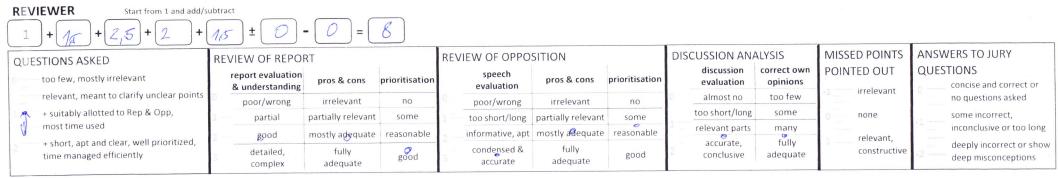
ANSWERS TO JURY,

NOTES:

1734 SI 26 TODG LIN 8



PANICAIRIL.





REPORTER Start from 1 and add/subtract

reporter: 6JH

fight (round no.): 4 stage: 1 room: 101

opponent: DSThaVA

problem no.: 11 Juror's name & signature:

EPORT							DISCUSSION WITH OPP	ONENT	ANSWERS TO JURY,
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	OPPONENT, and REVIEWER'S QUESTIONS
almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic		discussion	REVIEWER 3 QUESTIONS
some	some	some	some	review of sources, cited	partly	partly clear	too few	poor	concise and correct or
fair	fair	fair	not well fitting	some own input	average	average	some	some aspects fine	
good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	many + data/theory	good gome aspects	some incorrect,
detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	inte s esting solution	overal clear, demonstrative	convincingly supported	efficient	inconclusive or too long deeply incorrect or show deep misconceptions
deep and comprehensib shows physical insight	le, detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated	g — proved deep understanding	overall efficient	

NOTES:

