

# SCORESHEET

REPORTER Start from 1 and add/subtract

$$1 + \boxed{1} + \boxed{2} - \boxed{0} = \boxed{5}$$

stage: 1

fight (round no.): 5

room: B

problem no.: 9

Juror's name: Feng Song

reporter: AUSTRALIA

opponent: HUNGARY

reviewer: SWEDEN

signature: Feng Song

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	almost no	too few	X no/ almost no	others' data, incorrectly cited	misunderstood	0 --- almost no	too few	almost no, chaotic	
1 --- some	X some	X some	X some	X review of sources, cited	partly	1 --- only technical	some	avoided some	
2 --- fair	X fair	X fair	not well fitting	some own input	X average	2 --- points cleared	X many	questions	
3 --- good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution	3 --- interesting points discussed	+ data/theory convincingly supported	X cooperated well	
4 --- detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	4 --- brought in new physics	proved deep understanding	answered directly to most questions	
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		efficient, productive		

NOTES:

OPPONENT Start from 1 and add/subtract

$$1 + \boxed{1} + \boxed{2.5} + \boxed{2.5} - \boxed{0} = \boxed{6}$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
0 --- almost no, irrelevant	some relevant, aimed at resolving some unclear points	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
1 --- X		0 --- almost no	almost nothing	no or irrelevant	almost no	no	0 --- almost no	irrelevant	very little	almost no	no	
2 --- short allowing short answers, prioritized, all time used		1 --- very little	some main points	X few	X some	X almost no	1 --- little	X some	X some	X to some extent	X almost no	
		2 --- X not all	X main points	X some	to important topics	some	2 --- X partial	average	some correct	leading or cooperative	some	
		3 --- almost all	all relevant points	many	to most topics	reasonable	3 --- good	many	many correct	quite efficient	reasonable	
		4 --- all & efficiently	practically all points	practically all	+ improvement suggestions	very good	4 --- new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good	

NOTES:

REVIEWER Start from 1 and add/subtract

$$1 + \boxed{1} + \boxed{2} + \boxed{2} - \boxed{0} = \boxed{6}$$

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
0 --- too few, mostly irrelevant	some relevant, sufficient number, could clear things out	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
1 --- clear things out		0 --- poor	almost no	too few	irrelevant	no	0 --- poor	almost no	too few	irrelevant	no	
2 --- most time used, many unclear points resolved, aimed at both rep. and opp.		1 --- X partial	X too short/long	X some	X partially relevant	X almost no	1 --- X too short/long	X too short/long	X some	X partially relevant	X almost no	
3 --- +short, apt and clear, well prioritized time managed efficiently		2 --- good	relevant parts	many	mostly adequate	some	2 --- X informative, apt	X relevant parts	X many	X mostly adequate	X some	
		3 --- detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good	3 --- brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good	

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract

1 + 2 + 2 - 0.5 = 5

stage: 1  
reporter: Xiao-Ning Zhao  
AUSTRALIA

fight (round no.): 5  
opponent: Hungary

room: 3  
reviewer: Sweden

problem no.: 9

Juror's name: MATEJ BÄDN  
signature: Matej Baďn

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	scientific contribution	relevant arguments/responses	efficiency	
0 almost no	almost no	too few	no/almost no	others' data, incorrectly cited	misunderstood	0 almost no	too few	almost no, chaotic	0 concise and correct or no questions asked -0.5 some incorrect, inconclusive or too long -1 deeply incorrect or show deep misconceptions
1 some	some	some	some	review of sources, cited	partly	1 only technical points cleared	some	avoided some questions	
2 fair	fair	fair	not well fitting	some own input	average	2 some scientific points cleared	many	cooperated well	
3 good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution	3 interesting points discussed	+ data/theory convincingly supported	answered directly to most questions	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	4 brought in new physics	proved deep understanding	efficient, productive	
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				

NOTES: Drag Stoke's law  $F_D = 6\pi\eta r v$  (1) could be written much simpler if you separate the components  
 theoretical rain =  $\frac{g}{4\pi\eta\omega^2}$   
 (1)  $\rho \int v \cos^2 \theta \omega^2 x$   
 comparing the experiment?! Does not show good correlation between the model and results.

OPPONENT Start from 1 and add/subtract

1 + 1 + (2.25) + 2 - 0 = 6

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
0 almost no, irrelevant	1 some relevant, aimed at resolving some unclear points	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
2 short allowing short answers, prioritized, all time used		0 almost no	almost nothing	no or irrelevant	almost no	no	0 almost no	irrelevant	very little	almost no	no	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
		1 very little	some main points	few	some	almost no	1 little	some	some	to some extent	almost no	
		2 not all	main points	some	to important topics	some	2 partial	average	some correct	leading or cooperative	some	
		3 almost all	all relevant points	many	to most topics + improvement	reasonable	3 good	many	many correct	quite efficient	reasonable	
		4 efficiently	practically all points	practically all	suggestions	very good	4 new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good	

NOTES:  $\omega$ : frequency, velocity, position  
 small ball  $\leftarrow$  radius of the ball  
 very good understanding of the presentation  
 could be more specific in describing what has been done  
 Q: what is the stabilization mechanism which stabilizes the unstable equilibrium?  
 Setup, Motion, Experiments??!  
 Theory / Experiment comparison was addressed in speech, but not questioned in...

REVIEWER Start from 1 and add/subtract

1 + 1.5 + 2 + 1 - 0 = 6

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
0 too few, mostly irrelevant	1 some relevant, sufficient number, could clear things out	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
2 most time used, many unclear points resolved, aimed at both rep. and opp.		0 poor	almost no	too few	irrelevant	no	0 poor	almost no	too few	irrelevant	no	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
3 +short, apt and clear, well prioritized time managed efficiently		1 partial	too short/long	some	partially relevant	almost no	1 too short/long	too short/long	some	partially relevant	almost no	
		2 good	relevant parts	many	adequate	some	2 brief, apt	relevant parts	many	mostly adequate	some	
		3 detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good	3 brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good	

NOTES:  $\omega$ : air bubble motion of the ball  
 Stability - irrelevant  
 Q:  $F(k(F))$   
 What is it?  
 Stability - irrelevant  
 Com, has been discussed for actually a very long time

# SCORESHEET

REPORTER Start from 1 and add/subtract  
 1 + 3 + 3 - 0 = 7

stage: 1  
 reporter: Australia

fight (round no.): 5  
 opponent: Hungary

room: B  
 reviewer: Sweden

problem no.: 9

Juror's name: Chew Lok Yee  
 signature: [Signature]

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- almost no	0 --- too few	0 --- almost no, chaotic	
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- only technical	1 --- some	1 --- avoided some questions	
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- some scientific	2 --- many	2 --- cooperated well	
3 --- good	3 --- good	3 --- well performed, sufficient number	3 --- deviations qualitatively analysed	3 --- some interesting results	3 --- interesting solution	3 --- interesting points discussed	3 --- + data theory convincingly supported	3 --- answered directly to most questions	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained errors analysed	4 --- + theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- some aspects above average	4 --- brought in new physics	4 --- proved deep understanding	4 --- efficient, productive	
6 --- deep and comprehensible, shows physical insight	6 --- detailed, complex, completely testable	6 --- + reproducible, convincing analysis	6 --- well fitting, deviations analysed, conclusive	6 --- considerable experimental and theoretical	6 --- greater extent than expected				

NOTES:

OPPONENT Start from 1 and add/subtract  
 1 + 1 + 2 + 2 - 0 = 6

QUESTIONS ASKED	OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 --- almost no, irrelevant	0 --- almost no	0 --- almost nothing	0 --- no or irrelevant	0 --- almost no	0 --- no	0 --- almost no	0 --- irrelevant	0 --- very little	0 --- almost no	0 --- no	
1 --- some relevant, aimed at resolving some unclear points	1 --- very little	1 --- some main points	1 --- few	1 --- some	1 --- almost no	1 --- little	1 --- some	1 --- some	1 --- to some extent	1 --- almost no	
2 --- short allowing short answers, prioritized, all time used	2 --- not all	2 --- main points	2 --- some	2 --- to important topics	2 --- some	2 --- partial	2 --- average	2 --- some correct	2 --- leading or cooperative	2 --- some	
	3 --- almost all	3 --- all relevant points	3 --- many	3 --- to most topics	3 --- reasonable	3 --- good	3 --- many	3 --- many correct	3 --- quite efficient	3 --- reasonable	
	4 --- all & efficiently	4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- new crucial point(s)	4 --- almost all	4 --- + improvement suggestions	4 --- very efficient	4 --- very good	

NOTES:

REVIEWER Start from 1 and add/subtract  
 1 + 1 + 1.5 + 1.5 - 0 = 5

QUESTIONS ASKED	REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 --- too few, mostly irrelevant	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	
1 --- some relevant, sufficient number, could clear things out	1 --- partial	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	1 --- too short/long	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	
2 --- most time used, many unclear points resolved, aimed at both rep. and opp.	2 --- good	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	2 --- informative, apt	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	
3 --- +short, apt and clear, well prioritized time managed efficiently	3 --- detailed, complex	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	3 --- brief but accurate	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract

$$1 + \boxed{3.5} + \boxed{1.5} - \boxed{1} = \boxed{5}$$

stage: 1

fight (round no.): 5

room: B

problem no.: 9

Juror's name: MAMOIKA A.

reporter: Australia

opponent: Hungary

reviewer: Sweden

signature:

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	0 --- almost no	too few	almost no, chaotic	
1 --- some	some	some	some	review of sources, cited	partly	1 --- only technical	some	avoided some questions	
2 --- <del>some</del> fair	fair	fair	not well fitting	some own input	average	2 --- <del>some</del> some scientific	many	cooperated well	
3 --- good	good	well performed, sufficient number	<del>X</del> deviations qualitatively analysed	some interesting results	<del>X</del> interesting solution	3 --- interesting points	+ data/theory	answered directly	
4 --- <del>X</del> detailed demonstrative	<del>X</del> quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	4 --- discussed	convincingly supported	to most questions	
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	4 --- brought in new physics	proved deep understanding	efficient, productive	

NOTES:

OPPONENT Start from 1 and add/subtract

$$1 + \boxed{1.5} + \boxed{1.5} + \boxed{2} - \boxed{0} = \boxed{6}$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
		time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 --- almost no, irrelevant		almost no	almost nothing	no or irrelevant	almost no	no	0 --- almost no	irrelevant	very little	almost no	no	
1 --- some relevant, aimed at resolving some unclear points		1 --- very little	<del>X</del> some main points	<del>X</del> few	some	<del>X</del> almost no	1 --- little	some	some	to some extent	<del>X</del> almost no	
2 --- <del>X</del> short allowing short answers, prioritized, all time used		2 --- not all	main points	<del>X</del> some	to important topics	some	2 --- partial	average	some correct	leading or cooperative	some	
		3 --- <del>X</del> almost all	all relevant points	many	<del>X</del> to most topics	reasonable	3 --- good	many	many correct	<del>X</del> quite efficient	reasonable	
		4 --- all & efficiently	practically all points	practically all	+ improvement suggestions	very good	4 --- new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good	

NOTES:

REVIEWER Start from 1 and add/subtract

$$1 + \boxed{2.0} + \boxed{3} + \boxed{2} - \boxed{0} = \boxed{8}$$

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
		report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 --- too few, mostly irrelevant		poor	almost no	too few	irrelevant	no	0 --- poor	almost no	too few	irrelevant	no	
1 --- some relevant, sufficient number, could clear things out		1 --- partial	too short/long	some	partially relevant	almost no	1 --- too short/long	too short/long	some	partially relevant	almost no	
2 --- <del>X</del> most time used, many unclear points resolved, aimed at both rep. and opp.		2 --- good	relevant parts	<del>X</del> many	mostly adequate	some	2 --- <del>X</del> informative, apt	relevant parts	<del>X</del> many	mostly adequate	some	
3 --- +short, apt and clear, well prioritized time managed efficiently		3 --- detailed, complex	<del>X</del> accurate, conclusive	+ improvement suggestions	<del>X</del> fully adequate	<del>X</del> good	3 --- brief but accurate	<del>X</del> accurate, conclusive	+ improvement suggestions	fully adequate	good	

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract

1 + 25 + 25 -      = 6

stage: 1  
reporter: AUSTRALIA

fight (round no.): 5  
opponent: HUNGARY

room: B  
reviewer: SWEDEN

problem no.: 9

Juror's name: T. OPATRYV  
signature: T. Opatryv

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- almost no	0 --- too few	0 --- almost no, chaotic	
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- only technical	1 --- some	1 --- avoided some questions	
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting deviations	2 --- some own input	2 --- average	2 --- some scientific points cleared	2 --- many	2 --- cooperated well	
3 --- good	3 --- good	3 --- well performed, sufficient number	3 --- qualitatively analysed	3 --- some interesting results	3 --- interesting conclusion	3 --- interesting points discussed	3 --- data/theory convincingly supported	3 --- answered directly to most questions	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained, errors analysed	4 --- + theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- some aspects above average	4 --- brought in new physics	4 --- proved deep understanding	4 --- efficient productive	
5 --- deep and comprehensible, shows physical insight	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				

NOTES:

OPPONENT Start from 1 and add/subtract

1 + 1 + 25 + 25 -      = 7

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
		time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 --- almost no, irrelevant	0 --- some relevant, aimed at resolving some unclear points	0 --- almost no	0 --- almost nothing	0 --- no or irrelevant	0 --- almost no	0 --- no	0 --- almost no	0 --- irrelevant	0 --- very little	0 --- almost no	0 --- no	0 --- concise and correct or no questions asked
1 --- some relevant, aimed at resolving some unclear points	1 --- short allowing short answers, prioritized, all time used	1 --- very little	1 --- some main points	1 --- few	1 --- some	1 --- almost no	1 --- little	1 --- some	1 --- some	1 --- to some extent	1 --- almost no	1 --- some incorrect, inconclusive or too long
2 --- some relevant, aimed at resolving some unclear points	2 --- short allowing short answers, prioritized, all time used	2 --- not all	2 --- main points	2 --- some	2 --- to important topics	2 --- some	2 --- partial	2 --- average	2 --- some correct	2 --- leading or cooperative	2 --- some	2 --- some incorrect, inconclusive or too long
3 --- some relevant, aimed at resolving some unclear points	3 --- short allowing short answers, prioritized, all time used	3 --- almost all	3 --- all relevant points	3 --- many	3 --- to most topics	3 --- reasonable	3 --- good	3 --- many	3 --- many correct	3 --- quite efficient	3 --- reasonable	3 --- some incorrect, inconclusive or too long
4 --- some relevant, aimed at resolving some unclear points	4 --- short allowing short answers, prioritized, all time used	4 --- all & efficiently	4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- new crucial point(s)	4 --- almost all	4 --- + improvement suggestions	4 --- very efficient	4 --- very good	4 --- deeply incorrect or show deep misconceptions

NOTES:

REVIEWER Start from 1 and add/subtract

1 + 2 + 2 + 2 -      = 7

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
		report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 --- too few, mostly irrelevant	0 --- some relevant, sufficient number, could clear things out	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	0 --- concise and correct or no questions asked
1 --- some relevant, sufficient number, could clear things out	1 --- most time used, many unclear points resolved, aimed at both rep. and opp.	1 --- partial	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	1 --- too short/long	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	1 --- some incorrect, inconclusive or too long
2 --- some relevant, sufficient number, could clear things out	2 --- most time used, many unclear points resolved, aimed at both rep. and opp.	2 --- good	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	2 --- informative, apt	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	2 --- some incorrect, inconclusive or too long
3 --- some relevant, sufficient number, could clear things out	3 --- +short, apt and clear, well prioritized time managed efficiently	3 --- detailed, complex	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	3 --- brief but accurate	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	3 --- deeply incorrect or show deep misconceptions

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract

1 + ~~2~~ + 3 - 1 = 5

stage: 2

fight (round no.): 5

room: B

problem no.: 2

Juror's name: Feng Song

reporter: HUNGARY

opponent: SWEDEN

reviewer: AUSTRALIA

signature: *Feng Song*

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- almost no	0 --- too few	0 --- almost no, chaotic	
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- only technical	1 --- some	1 --- avoided some questions	
2 --- <input checked="" type="checkbox"/> fair	2 --- fair	2 --- <input checked="" type="checkbox"/> fair	2 --- <input checked="" type="checkbox"/> not well fitting	2 --- some own input	2 --- average	2 --- some scientific	2 --- many	2 --- <input checked="" type="checkbox"/> cooperated well	
3 --- good	3 --- <input checked="" type="checkbox"/> good	3 --- well performed, sufficient number	3 --- qualitatively analysed	3 --- some interesting results	3 --- interesting solution	3 --- interesting points	3 --- + data/theory	3 --- answered directly	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained errors analysed	4 --- + theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- some aspects above average	4 --- discussed	4 --- convincingly supported	4 --- to most questions	
6 --- deep and comprehensible, shows physical insight	6 --- detailed, complex, completely testable	6 --- + reproducible, convincing analysis	6 --- well fitting, deviations analysed, conclusive	6 --- considerable experimental and theoretical	6 --- greater extent than expected	6 --- brought in new physics	6 --- proved deep understanding	6 --- efficient, productive	

NOTES:

OPPONENT Start from 1 and add/subtract

1 + 1 + 2 + 2 - 0 = 6

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
0 --- almost no, irrelevant	1 --- some relevant, aimed at resolving some unclear points	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
2 --- short allowing short answers, prioritized, all time used		0 --- almost no	0 --- almost nothing	0 --- no or irrelevant	0 --- almost no	0 --- no	0 --- almost no	0 --- irrelevant	0 --- very little	0 --- almost no	0 --- no	
		1 --- very little	1 --- some main points	1 --- few	1 --- some	1 --- almost no	1 --- little	1 --- some	1 --- some	1 --- to some extent	1 --- almost no	
		2 --- <input checked="" type="checkbox"/> not all	2 --- <input checked="" type="checkbox"/> main points	2 --- some	2 --- some important topics	2 --- some	2 --- <input checked="" type="checkbox"/> partial	2 --- average	2 --- some correct	2 --- leading or cooperative	2 --- some	
		3 --- almost all	3 --- all relevant points	3 --- many	3 --- to most topics	3 --- reasonable	3 --- good	3 --- many	3 --- many correct	3 --- quite efficient	3 --- reasonable	
		4 --- all & efficiently	4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- new crucial point(s)	4 --- almost all	4 --- + improvement suggestions	4 --- very efficient	4 --- very good	

NOTES:

REVIEWER Start from 1 and add/subtract

1 + 2 + 2 + 1 - 0 = 6

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
0 --- too few, mostly irrelevant	1 --- some relevant, sufficient number, could clear things out	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
2 --- most time used, many unclear points resolved, aimed at both rep. and opp.		0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	
3 --- +short, apt and clear, well prioritized time managed efficiently		1 --- partial	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	1 --- <input checked="" type="checkbox"/> too short/long	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	
		2 --- <input checked="" type="checkbox"/> good	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	2 --- informative, apt	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	
		3 --- detailed, complex	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	3 --- brief but accurate	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	

NOTES:

# SCORESHEET

REPORTER  
1 +  $\frac{5}{5}$  + 2 - 0.5 =  $\frac{8}{8}$

stage: II  
reporter: HUNGARY

fight (round no.): 5  
opponent: SWEDEN  
room: B  
problem no.: 2  
reviewer: AUSTRALIA

Juror's name: HATEJ BADIN  
signature: *Hatej Badin*

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	scientific contribution	relevant arguments/responses	efficiency	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	0 almost no	too few	almost no, chaotic	
1 some	some	some	some	review of sources, cited	partly	1 only technical	some	avoided some questions	
2 fair	fair	fair	not well fitting	some own input	average	2 some scientific points cleared	many	cooperated well	
3 detailed	quite detailed, correct	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution	3 interesting points discussed	convincingly supported	answered directly to most questions	
4 demonstrative	detailed, complex, completely testable	+ results explained, errors analysed	+ theory limits explained, conclusive	considerable experimental and theoretical	greater extent than expected	4 brought in new physics	proved deep understanding	efficient, productive	

NOTES: DRINK THEORY ??  
TUBE ?  
Bacotic correction and correction...  
CLARIFIED PIPE

THEORY FOR MODEL  
DISPERSON. RELATION  
DOWN CONTRIBUTION

$\frac{kgA}{\rho} k = cotg(kL)$

Q: WHAT NOT IS REASON EQUILIBRIUM  
→ STILL SOME DISCREPANCY

Q: WHAT IS STRAIN STATE NOT REACHED ?

OPONENT  
1 + 2 + 1.5 + 2 - 0 = 6

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
0 almost no, irrelevant	1 some relevant, aimed at resolving	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 almost no, irrelevant	1 some relevant, aimed at resolving	0 almost no	almost nothing	no or irrelevant	almost no	no	0 almost no	irrelevant	very little	almost no	no	
1 some relevant, aimed at resolving	2 some unclear points	1.5 very little	some main points	few	some	almost no	1 little	some	some	to some extent	almost no	
2 short allowing short answers, prioritized, all time used		2 not all	main points	some	to important topics	some	2 partial	average	some correct	leading or cooperative	some	
		3 almost all	all relevant points	many	to most topics	reasonable	3 good	many	improvement	quite efficient	reasonable	
		4 all & efficiently	practically all points	practically all	+ improvement suggestions	very good	4 new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good	

NOTES: relevant parameters of the and the system  
end correction

THEORETICAL MODEL  
- how we get it - irrelevant  
2D, membrane  
EXPERIMENT

could have given more insight into physics why does point are crucial, how they put at the res.?

OPONENT DISCUSSION

He does not pay enough attention to the numbers.

REVIEWER  
1 + 1 + (2.5) + 2.5 - 0 = 7

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
0 too few, mostly irrelevant	1 some relevant, sufficient number, could clear things out	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 too few, mostly irrelevant	1 some relevant, sufficient number, could clear things out	0 poor	almost no	too few	irrelevant	no	0 poor	almost no	too few	irrelevant	no	
1 some relevant, sufficient number, could clear things out	2 most time used, many unclear points resolved, aimed at both rep. and opp.	1 partial	too short/long	some	partially relevant	almost no	1 too short/long	too short/long	some	partially relevant	almost no	
2 most time used, many unclear points resolved, aimed at both rep. and opp.	3 +short, apt and clear, well prioritized time managed efficiently	2 good	relevant parts	many	mostly adequate	some	2.5 informative, apt	relevant parts	many	mostly adequate	some	
		3 detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate		3 brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good	

NOTES: what did you mean by the color of the balance?

# SCORESHEET

REPORTER Start from 1 and add/subtract  
 1 + 5 + 2 - 0 = 8

stage: 2  
 reporter: Hungary

fight (round no.): 5  
 opponent: Sweden

room: B  
 reviewer: Australia

problem no.: 2

Juror's name: Chew Locke  
 signature: [Signature]

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- almost no	0 --- too few	0 --- almost no, chaotic	
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- only technical	1 --- some	1 --- avoided some questions	
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- some scientific points cleared	2 --- many	2 --- cooperated well	
3 --- good	3 --- good	3 --- well performed, sufficient number	3 --- deviations qualitatively analysed	3 --- some interesting results	3 --- interesting solution	3 --- points cleared	3 --- + data/theory	3 --- answered directly to most questions	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained errors analysed	4 --- + the theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- some aspects above average	4 --- interesting points discussed	4 --- convincingly supported	4 --- efficient, productive	
5 --- deep and comprehensible, shows physical insight	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 --- brought in new physics	5 --- proved deep understanding	5 --- to most questions	

NOTES:

OPPONENT Start from 1 and add/subtract  
 1 + 1 + 2 + 2 - 0 = 6

QUESTIONS ASKED	OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 --- almost no, irrelevant	0 --- almost no	0 --- almost nothing	0 --- no or irrelevant	0 --- almost no	0 --- no	0 --- almost no	0 --- irrelevant	0 --- very little	0 --- almost no	0 --- no	
1 --- some relevant, aimed at resolving some unclear points	1 --- very little	1 --- some main points	1 --- few	1 --- some	1 --- almost no	1 --- little	1 --- some	1 --- some	1 --- to some extent	1 --- almost no	
2 --- short allowing short answers, prioritized, all time used	2 --- not all	2 --- main points	2 --- some	2 --- to important topics	2 --- some	2 --- partial	2 --- average	2 --- some correct	2 --- leading or cooperative	2 --- some	
	3 --- almost all	3 --- all relevant points	3 --- many	3 --- to most topics	3 --- reasonable	3 --- good	3 --- many	3 --- many correct	3 --- quite efficient	3 --- reasonable	
	4 --- all & efficiently	4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- new crucial point(s)	4 --- almost all	4 --- + improvement suggestions	4 --- very efficient	4 --- very good	

NOTES:

REVIEWER Start from 1 and add/subtract  
 1 + 2 + 2.5 + 2.5 - 0 = 8

QUESTIONS ASKED	REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 --- too few, mostly irrelevant	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	
1 --- some relevant, sufficient number, could clear things out	1 --- partial	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	1 --- too short/long	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	
2 --- most time used, many unclear points resolved, aimed at both rep. and opp.	2 --- good	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	2 --- informative, apt	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	
3 --- +short, apt and clear, well prioritized time managed efficiently	3 --- detailed, complex	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	3 --- brief but accurate	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	

NOTES:



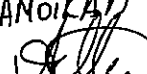
# SCORESHEET

REPORTER Start from 1 and add/subtract  
 1 +  $\boxed{4.5}$  +  $\boxed{1.5}$  -  $\boxed{0}$  =  $\boxed{7}$

stage:  $\boxed{2}$   
 reporter:

fight (round no.):  $\boxed{5}$   
 opponent:

room:  $\boxed{B}$  problem no.:  $\boxed{2}$   
 reviewer:  $\boxed{Australia}$

Juror's name:  $\boxed{MANOIKAA}$   
 signature: 

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	scientific contribution	relevant arguments/responses	efficiency	
0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> too few	0 <input type="checkbox"/> no/ almost no	0 <input type="checkbox"/> others' data, incorrectly cited	0 <input type="checkbox"/> misunderstood	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> too few	0 <input type="checkbox"/> almost no, chaotic	
1 <input type="checkbox"/> some	1 <input type="checkbox"/> some	1 <input type="checkbox"/> some	1 <input type="checkbox"/> some	1 <input type="checkbox"/> review of sources, cited	1 <input type="checkbox"/> partly	1 <input type="checkbox"/> only technical	1 <input type="checkbox"/> some	1 <input checked="" type="checkbox"/> avoided some questions	
2 <input type="checkbox"/> fair	2 <input type="checkbox"/> fair	2 <input type="checkbox"/> fair	2 <input type="checkbox"/> not well fitting	2 <input type="checkbox"/> some own input	2 <input type="checkbox"/> average	2 <input type="checkbox"/> some scientific	2 <input checked="" type="checkbox"/> many	2 <input type="checkbox"/> cooperated well	
3 <input type="checkbox"/> good	3 <input type="checkbox"/> good	3 <input checked="" type="checkbox"/> well performed, sufficient number	3 <input checked="" type="checkbox"/> deviations qualitatively analysed	3 <input type="checkbox"/> some interesting results	3 <input type="checkbox"/> interesting solution	3 <input checked="" type="checkbox"/> points cleared	3 <input type="checkbox"/> + data/theory	3 <input type="checkbox"/> answered directly to most questions	
4 <input type="checkbox"/> detailed demonstrative	4 <input checked="" type="checkbox"/> quite detailed, correct	4 <input checked="" type="checkbox"/> + results explained errors analysed	4 <input checked="" type="checkbox"/> + theory limits explained, conclusive	4 <input checked="" type="checkbox"/> considerable experimental or theoretical	4 <input checked="" type="checkbox"/> some aspects above average	4 <input type="checkbox"/> interesting points discussed	4 <input type="checkbox"/> convincingly supported	4 <input type="checkbox"/> efficient, productive	
5 <input type="checkbox"/> deep and comprehensive, shows physical insight	5 <input type="checkbox"/> detailed, complex, completely testable	5 <input checked="" type="checkbox"/> + reproducible, convincing analysis	5 <input checked="" type="checkbox"/> well fitting, deviations analysed, conclusive	5 <input type="checkbox"/> considerable experimental and theoretical	5 <input type="checkbox"/> greater extent than expected	5 <input type="checkbox"/> brought in new physics	5 <input type="checkbox"/> proved deep understanding	5 <input type="checkbox"/> efficient, productive	

NOTES:

OPPONENT Start from 1 and add/subtract

1 +  $\boxed{1}$  +  $\boxed{2}$  +  $\boxed{1.5}$  -  $\boxed{0.5}$  =  $\boxed{5}$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS	
		time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation		
0 <input type="checkbox"/>	almost no, irrelevant	0 <input type="checkbox"/>	almost no	0 <input type="checkbox"/>	almost no	0 <input type="checkbox"/>	almost no	0 <input type="checkbox"/>	almost no	0 <input type="checkbox"/>	almost no	0 <input type="checkbox"/>	concise and correct or no questions asked
1 <input checked="" type="checkbox"/>	some relevant, aimed at resolving some unclear points	1 <input type="checkbox"/>	very little	1 <input checked="" type="checkbox"/>	some main points	1 <input type="checkbox"/>	little	1 <input type="checkbox"/>	some	1 <input checked="" type="checkbox"/>	to some extent	1 <input type="checkbox"/>	some incorrect, inconclusive or too long
2 <input checked="" type="checkbox"/>	short allowing short answers, prioritized, all time used	2 <input type="checkbox"/>	not all	2 <input checked="" type="checkbox"/>	main points	2 <input type="checkbox"/>	partial	2 <input type="checkbox"/>	average	2 <input type="checkbox"/>	some correct	2 <input type="checkbox"/>	leading or cooperative
3 <input type="checkbox"/>		3 <input checked="" type="checkbox"/>	almost all	3 <input type="checkbox"/>	all relevant points	3 <input type="checkbox"/>	good	3 <input type="checkbox"/>	many	3 <input type="checkbox"/>	many correct	3 <input type="checkbox"/>	quite efficient
4 <input type="checkbox"/>		4 <input type="checkbox"/>	all & efficiently	4 <input type="checkbox"/>	practically all points	4 <input type="checkbox"/>	new crucial point(s)	4 <input type="checkbox"/>	almost all	4 <input type="checkbox"/>	+ improvement suggestions	4 <input type="checkbox"/>	very efficient

NOTES:

REVIEWER Start from 1 and add/subtract

1 +  $\boxed{0.5}$  +  $\boxed{1.5}$  +  $\boxed{2.5}$  -  $\boxed{0}$  =  $\boxed{6}$

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS	
		report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation		
0 <input type="checkbox"/>	too few, mostly irrelevant	0 <input type="checkbox"/>	poor	0 <input type="checkbox"/>	almost no	0 <input type="checkbox"/>	too few	0 <input type="checkbox"/>	irrelevant	0 <input type="checkbox"/>	no	0 <input type="checkbox"/>	concise and correct or no questions asked
1 <input checked="" type="checkbox"/>	some relevant, sufficient number, could clear things out	1 <input type="checkbox"/>	partial	1 <input checked="" type="checkbox"/>	too short/long	1 <input type="checkbox"/>	some	1 <input checked="" type="checkbox"/>	partially relevant	1 <input type="checkbox"/>	almost no	1 <input type="checkbox"/>	some incorrect, inconclusive or too long
2 <input type="checkbox"/>	most time used, many unclear points resolved, aimed at both rep. and opp.	2 <input checked="" type="checkbox"/>	good	2 <input type="checkbox"/>	relevant parts	2 <input type="checkbox"/>	many	2 <input checked="" type="checkbox"/>	mostly adequate	2 <input type="checkbox"/>	some	2 <input type="checkbox"/>	deeply incorrect or show deep misconceptions
3 <input type="checkbox"/>	+short, apt and clear, well prioritized time managed efficiently	3 <input type="checkbox"/>	detailed, complex	3 <input type="checkbox"/>	accurate, conclusive	3 <input type="checkbox"/>	+ improvement suggestions	3 <input type="checkbox"/>	fully adequate	3 <input type="checkbox"/>	good	3 <input type="checkbox"/>	deeply incorrect or show deep misconceptions

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract  
 1 + 5 + 3 -      = 9

stage: 2  
 reporter: HUNGARY

fight (round no.): 5  
 opponent: SWEDEN

room: B  
 reviewer: AUSTRALIA

problem no.: 2

Juror's name: T. OPATRY  
 signature: [Signature]

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- almost no	0 --- too few	0 --- almost no, chaotic	
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- only technical	1 --- some	1 --- avoided some	
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- some scientific	2 --- many	2 --- questions	
3 --- good	3 --- good	3 --- well performed, sufficient number	3 --- deviations	3 --- some interesting results	3 --- interesting solution	3 --- interesting points	3 --- + data/theory	3 --- cooperated well	
4 --- detailed	4 --- quite detailed, correct	4 --- + results explained	4 --- qualitatively analysed	4 --- considerable experimental	4 --- some aspects above average	4 --- discussed	4 --- convincingly supported	4 --- answered directly	
5 --- demonstrative	5 --- detailed, complex, completely testable	5 --- errors analysed	5 --- + theory limits explained, conclusive	5 --- of theoretical	5 --- greater extent than expected	5 --- brought in new physics	5 --- proved deep understanding	5 --- to most questions	
6 --- deep and comprehensive, shows physical insight	6 --- detailed, complex, completely testable	6 --- + reproducible, convincing analysis	6 --- well fitting, deviations analysed, conclusive	6 --- considerable experimental and theoretical				6 --- efficient, productive	

NOTES:

OPPONENT Start from 1 and add/subtract  
 1 + 0.5 + 2 + 1.5 -      = 5

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
0 --- almost no, irrelevant	1 --- some relevant, aimed at resolving	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 --- some unclear points	0 --- short allowing short answers, prioritized, all time used	0 --- almost no	0 --- almost nothing	0 --- no or irrelevant	0 --- almost no	0 --- no	0 --- almost no	0 --- irrelevant	0 --- very little	0 --- almost no	0 --- no	
1 --- some relevant, aimed at resolving	1 --- some unclear points	1 --- very little	1 --- some main points	1 --- few	1 --- some	1 --- almost no	1 --- little	1 --- some	1 --- some	1 --- to some extent	1 --- almost no	
2 --- short allowing short answers, prioritized, all time used	2 --- some unclear points	2 --- not all	2 --- main points	2 --- some	2 --- to important topics	2 --- some	2 --- partial	2 --- average	2 --- some correct	2 --- leading or cooperative	2 --- some	
		3 --- almost all	3 --- all relevant points	3 --- many	3 --- to most topics	3 --- reasonable	3 --- good	3 --- many	3 --- many correct	3 --- quite efficient	3 --- reasonable	
		4 --- all & efficiently	4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- new crucial point(s)	4 --- almost all	4 --- + improvement suggestions	4 --- very efficient	4 --- very good	

NOTES:

REVIEWER Start from 1 and add/subtract  
 1 + 1 + 2 + 2 -      = 6

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
0 --- too few, mostly irrelevant	1 --- some relevant, sufficient number, could clear things out	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 --- too few, mostly irrelevant	0 --- some relevant, sufficient number, could clear things out	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	
1 --- clear things out	1 --- most time used, many unclear points	1 --- partial	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	1 --- too short/long	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	
2 --- resolved, aimed at both rep. and opp.	2 --- +short, apt and clear, well prioritized time managed efficiently	2 --- good	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	2 --- informative, apt	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	
		3 --- detailed, complex	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	3 --- brief but accurate	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract  
 1 + 2.5 + 2.5 - 0 = 6

stage: 3  
 reporter: SWEDEN

fight (round no.): 5  
 opponent: AUSTRALIA

room: B problem no.: 15  
 reviewer: HUNGARY

Juror's name: Feng Song  
 signature: Feng Song

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	almost no	too few	<input checked="" type="checkbox"/> no/ almost no	others' data, incorrectly cited	misunderstood	0 --- almost no	too few	almost no, chaotic	
1 --- <input checked="" type="checkbox"/> some	some	some	<input checked="" type="checkbox"/> some	review of sources, cited	partly	1 --- only technical	some	avoided some questions	
2 --- fair	<input checked="" type="checkbox"/> fair	<input checked="" type="checkbox"/> fair	not well fitting	some own input	average	2 --- some scientific points cleared	<input checked="" type="checkbox"/> many	cooperated well	
3 --- good	good	well performed, sufficient number	qualitatively analysed	<input checked="" type="checkbox"/> some interesting results	<input checked="" type="checkbox"/> interesting solution	3 --- <input checked="" type="checkbox"/> interesting points discussed	+ data/theory convincingly supported	answered directly to most questions	
4 --- detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	4 --- brought in new physics	proved deep understanding	efficient, productive	
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				

NOTES:

OPPONENT Start from 1 and add/subtract  
 1 + 1 + 2.2 + 2.0 - 0 = 6

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
0 --- almost no, irrelevant	1 --- some relevant, aimed at resolving	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
1 --- <input checked="" type="checkbox"/> some unclear points	short allowing short answers, prioritized, all time used	0 --- almost no	almost nothing	no or irrelevant	almost no	no	0 --- almost no	irrelevant	very little	almost no	no	
2 --- <input checked="" type="checkbox"/> some relevant points		1 --- very little	<input checked="" type="checkbox"/> some main points	few	<input checked="" type="checkbox"/> some	almost no	1 --- little	some	some	to some extent	almost no	
3 --- <input checked="" type="checkbox"/> almost all		2 --- not all	main points	<input checked="" type="checkbox"/> some	to important topics	<input checked="" type="checkbox"/> some	2 --- <input checked="" type="checkbox"/> partial	average	some correct	leading or cooperative	some	
4 --- all & efficiently		3 --- almost all	all relevant points	many	to most topics	reasonable	3 --- good	many	many correct	quite efficient	reasonable	
		4 --- all & efficiently	practically all points	practically all	+ improvement suggestions	very good	4 --- new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good	

NOTES:

REVIEWER Start from 1 and add/subtract  
 1 + 2 + 2 + 2 - 0 = 7

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
0 --- too few, mostly irrelevant	1 --- some relevant, sufficient number, could clear things out	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
1 --- most time used, many unclear points	resolved, aimed at both rep. and opp.	0 --- poor	almost no	too few	irrelevant	no	0 --- poor	almost no	too few	irrelevant	no	
2 --- <input checked="" type="checkbox"/> +short, apt and clear, well prioritized time managed efficiently		1 --- partial	too short/long	some	partially relevant	almost no	1 --- too short/long	too short/long	some	partially relevant	almost no	
		2 --- good	relevant parts	many	mostly adequate	<input checked="" type="checkbox"/> some	2 --- informative, apt	relevant parts	many	mostly adequate	<input checked="" type="checkbox"/> some	
		3 --- detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good	3 --- brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good	

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract

$$1 + (2.5) + 2 - 0 = 6$$

stage: 11  
reporter: SWEDEN

fight (round no.): 5  
opponent: AUSTRALIA

room: B  
reviewer: HUNGARY

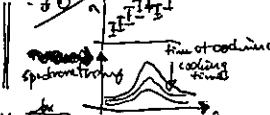
problem no.: 15

Juror's name: KATEJ BADIN

signature: *Mulij Belar*

REPORT	Physical view into the problem is missing from the experiments					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	scientific contribution	relevant arguments/responses		efficiency
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	almost no	too few	almost no, chaotic	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1	some	fair	some	not well fitting	review of sources, cited	partly	only technical	some	avoided some questions	
2	fair	fair	fair	deviations	some own input	interesting solution	points cleared	many	cooperated well	
3	good	good	well performed, sufficient number	qualitatively analysed	some interesting results		some scientific points cleared			
4	detailed	quite detailed, correct	+ results explained	+ theory limits	considerable experimental or theoretical	some aspects above average	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions	
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	brought in new physics	proved deep understanding	efficient, productive	

NOTES: NETRO 1.2  
CONTROL OF THE TEMPERATURE  
~ 7.5 min half boiled egg



PCA analysis of the theory  
interpolation some order  
Estimated cooling curve  
↑ accuracy  
↓ sensitivity  
Equivalent to cooling time

Q2: Physical effect 4th order  
Q4: Heat & the  
variance between the eggs

OPPONENT Start from 1 and add/subtract

$$1 + 1 + (1.5) + 2 - 0 = 6$$

QUESTIONS ASKED	OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 — almost no, irrelevant	almost no	almost nothing	no or irrelevant	almost no	no	almost no	irrelevant	very little	almost no	no	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — some relevant, aimed at resolving some unclear points	very little	some main points	few	some	almost no	little	some	some	to some extent	almost no	
2 — short allowing short answers, prioritized, all time used	not all	main points	some	to important topics	some	partial	average	some correct	leading or cooperative	some	
	almost all	all relevant points	many	to most topics	reasonable	good	many	many correct	quite efficient	reasonable	
	all & efficiently	practically all points	practically all	+ improvement suggestions	very good	new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good	

NOTES:  
• boiling water  
• non-spherical water - resistance  
• awareness sensitivity → actual values

• general comment

DISCUSSION:  
• calculating heat transfer in egg  
• already incorrect specific values of temperature  
• "heat inertia" → in the egg  
• Consideration of the eggs & white  
• Date of to degree to which is cooking  
• Force diameter

REVIEWER Start from 1 and add/subtract

$$1 + 2 + 2 + 1.5 - 0 = 6$$

QUESTIONS ASKED	REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 — too few, mostly irrelevant	poor	almost no	too few	irrelevant	no	poor	almost no	too few	irrelevant	no	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — some relevant, sufficient number, could clear things out	partial	too short/long	some	partially relevant	almost no	too short/long	too short/long	some	partially relevant	almost no	
2 — most time used, many unclear points resolved, aimed at both rep. and opp.	good	relevant parts	many	mostly adequate	some	informative, apt	relevant parts	many	mostly adequate	some	
3 — +short, apt and clear, well prioritized time managed efficiently	detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good	brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good	

NOTES:  
Question 1  
• cooling see eggs with water  
• 1st method  
• boiling eggs → sensitivity  
• 1st method  
• bring eggs into the same

Question 2  
guess 53-63g  
light source knowledge  
covers the whole frequency range

# SCORESHEET

REPORTER Start from 1 and add/subtract  
 1 + 4 + 3 - 0 = 8

stage: 3  
 reporter: Sweden

fight (round no.): 5  
 opponent: Australia

room: B  
 reviewer: Hungary

problem no.: 15

Juror's name: Chen Lock Yue  
 signature: A. H.

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	scientific contribution	relevant arguments/responses	efficiency	
0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> too few	0 <input type="checkbox"/> no/ almost no	0 <input type="checkbox"/> others' data, incorrectly cited	0 <input type="checkbox"/> misunderstood	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> too few	0 <input type="checkbox"/> almost no, chaotic	
1 <input type="checkbox"/> some	1 <input type="checkbox"/> some	1 <input type="checkbox"/> some	1 <input type="checkbox"/> some	1 <input type="checkbox"/> review of sources, cited	1 <input type="checkbox"/> partly	1 <input type="checkbox"/> only technical	1 <input type="checkbox"/> some	1 <input type="checkbox"/> avoided some	
2 <input type="checkbox"/> fair	2 <input type="checkbox"/> fair	2 <input type="checkbox"/> fair	2 <input type="checkbox"/> not well fitting	2 <input type="checkbox"/> some own input	2 <input type="checkbox"/> average	2 <input type="checkbox"/> some scientific	2 <input type="checkbox"/> many	2 <input type="checkbox"/> questions	
3 <input type="checkbox"/> good	3 <input type="checkbox"/> good	3 <input type="checkbox"/> well performed, sufficient number	3 <input type="checkbox"/> deviations	3 <input type="checkbox"/> some interesting results	3 <input type="checkbox"/> interesting solution	3 <input type="checkbox"/> points cleared	3 <input type="checkbox"/> + data/theory	3 <input type="checkbox"/> cooperated well	
4 <input type="checkbox"/> detailed	4 <input type="checkbox"/> quite detailed, correct	4 <input type="checkbox"/> + results explained	4 <input type="checkbox"/> qualitatively analysed	4 <input type="checkbox"/> + theory limits	4 <input type="checkbox"/> some aspects above average	4 <input type="checkbox"/> interesting points discussed	4 <input type="checkbox"/> + data/theory convincingly supported	4 <input type="checkbox"/> answered directly	
5 <input type="checkbox"/> demonstrative	5 <input type="checkbox"/> detailed, complex, completely testable	5 <input type="checkbox"/> errors analysed	5 <input type="checkbox"/> explained, conclusive	5 <input type="checkbox"/> well fitting, deviations analysed, conclusive	5 <input type="checkbox"/> considerable experimental or theoretical	5 <input type="checkbox"/> brought in new physics	5 <input type="checkbox"/> proved deep understanding	5 <input type="checkbox"/> to most questions efficient, productive	
6 <input type="checkbox"/> deep and comprehensible, shows physical insight	6 <input type="checkbox"/> detailed, complex, completely testable	6 <input type="checkbox"/> + reproducible, convincing analysis	6 <input type="checkbox"/> well fitting, deviations analysed, conclusive	6 <input type="checkbox"/> considerable experimental and theoretical	6 <input type="checkbox"/> greater extent than expected			6 <input type="checkbox"/> to most questions efficient, productive	

NOTES:

OPPONENT Start from 1 and add/subtract  
 1 + 1 + 2 + 1 - 0 = 5

QUESTIONS ASKED	OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 <input type="checkbox"/> almost no, irrelevant	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> almost nothing	0 <input type="checkbox"/> no or irrelevant	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> no	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> irrelevant	0 <input type="checkbox"/> very little	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> no	
1 <input type="checkbox"/> some relevant, aimed at resolving some unclear points	1 <input type="checkbox"/> very little	1 <input type="checkbox"/> some main points	1 <input type="checkbox"/> few	1 <input type="checkbox"/> some	1 <input type="checkbox"/> almost no	1 <input type="checkbox"/> little	1 <input type="checkbox"/> some	1 <input type="checkbox"/> some	1 <input type="checkbox"/> to some extent	1 <input type="checkbox"/> almost no	
2 <input type="checkbox"/> short allowing short answers, prioritized, all time used	2 <input type="checkbox"/> not all	2 <input type="checkbox"/> main points	2 <input type="checkbox"/> some	2 <input type="checkbox"/> to important topics	2 <input type="checkbox"/> some	2 <input type="checkbox"/> partial	2 <input type="checkbox"/> average	2 <input type="checkbox"/> some correct	2 <input type="checkbox"/> leading or cooperative	2 <input type="checkbox"/> some	
	3 <input type="checkbox"/> almost all	3 <input type="checkbox"/> all relevant points	3 <input type="checkbox"/> many	3 <input type="checkbox"/> to most topics	3 <input type="checkbox"/> reasonable	3 <input type="checkbox"/> good	3 <input type="checkbox"/> many	3 <input type="checkbox"/> many correct	3 <input type="checkbox"/> quite efficient	3 <input type="checkbox"/> reasonable	
	4 <input type="checkbox"/> all & efficiently	4 <input type="checkbox"/> practically all points	4 <input type="checkbox"/> practically all	4 <input type="checkbox"/> + improvement suggestions	4 <input type="checkbox"/> very good	4 <input type="checkbox"/> new crucial point(s)	4 <input type="checkbox"/> almost all	4 <input type="checkbox"/> + improvement suggestions	4 <input type="checkbox"/> very efficient	4 <input type="checkbox"/> very good	

NOTES:

REVIEWER Start from 1 and add/subtract  
 1 + 2 + 0.5 + 0.5 - 0 = 8

QUESTIONS ASKED	REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 <input type="checkbox"/> too few, mostly irrelevant	0 <input type="checkbox"/> poor	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> too few	0 <input type="checkbox"/> irrelevant	0 <input type="checkbox"/> no	0 <input type="checkbox"/> poor	0 <input type="checkbox"/> almost no	0 <input type="checkbox"/> too few	0 <input type="checkbox"/> irrelevant	0 <input type="checkbox"/> no	
1 <input type="checkbox"/> some relevant, sufficient number, could clear things out	1 <input type="checkbox"/> partial	1 <input type="checkbox"/> too short/long	1 <input type="checkbox"/> some	1 <input type="checkbox"/> partially relevant	1 <input type="checkbox"/> almost no	1 <input type="checkbox"/> too short/long	1 <input type="checkbox"/> too short/long	1 <input type="checkbox"/> some	1 <input type="checkbox"/> partially relevant	1 <input type="checkbox"/> almost no	
2 <input type="checkbox"/> most time used, many unclear points resolved, aimed at both rep. and opp.	2 <input type="checkbox"/> good	2 <input type="checkbox"/> relevant parts	2 <input type="checkbox"/> many	2 <input type="checkbox"/> mostly adequate	2 <input type="checkbox"/> some	2 <input type="checkbox"/> informative, apt	2 <input type="checkbox"/> relevant parts	2 <input type="checkbox"/> many	2 <input type="checkbox"/> mostly adequate	2 <input type="checkbox"/> some	
3 <input type="checkbox"/> +short, apt and clear, well prioritized time managed efficiently	3 <input type="checkbox"/> detailed, complex	3 <input type="checkbox"/> accurate, conclusive	3 <input type="checkbox"/> + improvement suggestions	3 <input type="checkbox"/> fully adequate	3 <input type="checkbox"/> good	3 <input type="checkbox"/> brief but accurate	3 <input type="checkbox"/> accurate, conclusive	3 <input type="checkbox"/> + improvement suggestions	3 <input type="checkbox"/> fully adequate	3 <input type="checkbox"/> good	

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract  
 1 +  $\boxed{4.5}$  +  $\boxed{1.5}$  -  $\boxed{0}$  =  $\boxed{7}$

stage:  $\boxed{3}$   
 reporter: *Sweden*

fight (round no.):  $\boxed{5}$   
 opponent: *Australia*

room:  $\boxed{B}$   
 problem no.:  $\boxed{15}$   
 reviewer: *Hungary*

Juror's name: *MAMOILKA A.*  
 signature: *[Signature]*

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	scientific contribution	relevant arguments/responses	efficiency	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- almost no	0 --- too few	0 --- almost no, chaotic	0 <input checked="" type="checkbox"/> concise and correct or no questions asked -1 --- some incorrect, inconclusive or too long -2 --- deeply incorrect or show deep misconceptions
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- only technical	1 --- some	1 --- avoided some	
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- points cleared	2 --- many	2 --- questions	
3 --- <input checked="" type="checkbox"/> good	3 --- <input checked="" type="checkbox"/> good	3 --- well performed, sufficient number	3 --- deviations	3 --- some interesting results	3 --- interesting solution	3 --- <input checked="" type="checkbox"/> some scientific	3 --- + data/theory	3 --- answered directly	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- results explained	4 --- qualitatively analysed + theory limits	4 --- considerable experimental or theoretical	4 --- some aspects above average	4 --- interesting points discussed	4 --- convincingly supported	4 --- to most questions	
6 --- deep and comprehensible, shows physical insight	6 --- detailed, complex, completely testable	6 --- + reproducible, convincing analysis	6 --- well fitting, deviations analysed, conclusive	6 --- considerable experimental and theoretical	6 --- greater extent than expected	6 --- brought in new physics	6 --- proved deep understanding	6 --- efficient, productive	

NOTES:

OPPONENT Start from 1 and add/subtract  
 1 +  $\boxed{1}$  +  $\boxed{1.5; 2.0}$  +  $\boxed{2.0}$  -  $\boxed{0}$  =  $\boxed{5}$

QUESTIONS ASKED	OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 --- almost no, irrelevant	0 --- almost no	0 --- almost nothing	0 --- no or irrelevant	0 --- almost no	0 --- <input checked="" type="checkbox"/> no	0 --- almost no	0 --- irrelevant	0 --- very little	0 --- almost no	0 --- no	0 --- concise and correct or no questions asked -1 --- some incorrect, inconclusive or too long -2 --- deeply incorrect or show deep misconceptions
1 --- <input checked="" type="checkbox"/> some relevant, aimed at resolving	1 --- very little	1 --- some main points	1 --- few	1 --- some	1 --- almost no	1 --- little	1 --- some	1 --- some	1 --- to some extent	1 --- almost no	
2 --- some unclear points	2 --- not all	2 --- main points	2 --- some	2 --- to important topics	2 --- some	2 --- partial	2 --- average	2 --- some correct	2 --- leading or cooperative	2 --- some	
2 --- short allowing short answers, prioritized, all time used	3 --- <input checked="" type="checkbox"/> almost all	3 --- all relevant points	3 --- many	3 --- to most topics	3 --- reasonable	3 --- <input checked="" type="checkbox"/> good	3 --- many	3 --- many correct	3 --- quite efficient	3 --- reasonable	
	4 --- all & efficiently	4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- new crucial point(s)	4 --- almost all	4 --- + improvement suggestions	4 --- very efficient	4 --- very good	

NOTES:

REVIEWER Start from 1 and add/subtract  
 1 +  $\boxed{2}$  +  $\boxed{1.5}$  +  $\boxed{2}$  -  $\boxed{0}$  =  $\boxed{7}$

QUESTIONS ASKED	REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 --- too few, mostly irrelevant	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- irrelevant	0 --- no	0 <input checked="" type="checkbox"/> concise and correct or no questions asked -1 --- some incorrect, inconclusive or too long -2 --- deeply incorrect or show deep misconceptions
1 --- some relevant, sufficient number, could clear things out	1 --- partial	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	1 --- too short/long	1 --- too short/long	1 --- some	1 --- partially relevant	1 --- almost no	
2 --- most time used, many unclear points	2 --- <input checked="" type="checkbox"/> good	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	2 --- informative, apt	2 --- relevant parts	2 --- many	2 --- mostly adequate	2 --- some	
2 --- resolved, aimed at both rep. and opp.	3 --- detailed, complex	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	3 --- brief but accurate	3 --- accurate, conclusive	3 --- + improvement suggestions	3 --- fully adequate	3 --- good	
3 --- +short, apt and clear, well prioritized time managed efficiently											

NOTES:

# SCORESHEET

REPORTER Start from 1 and add/subtract  
 1 + 3 + 2 -   = 6

stage: 3 fight (round no.): 5 room: B problem no.: 15 Juror's name: T. OPATRU  
 reporter: SWEDEN opponent: AUSTRALIA reviewer: HUNGARY signature: T.O.

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	scientific contribution	relevant arguments/responses	efficiency	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	0 almost no	too few	almost no, chaotic	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 some	some	some	some	review of sources, cited	partly	1 only technical points cleared	some	avoided some questions	
2 fair	fair	fair	not well fitting deviations	some own input	average	2 some scientific points cleared	many	cooperated well	
3 good	good	well performed, sufficient number	qualitatively analysed	some interesting results	interesting solution	3 interesting points discussed	+ data/theory	answered directly	
4 detailed	quite detailed, correct	+ results explained	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	4 brought in new physics	convincingly supported	proved deep understanding	
5 demonstrative	detailed, complex, completely testable	errors analysed	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected		to most questions efficient, productive		

NOTES:

OPPONENT Start from 1 and add/subtract  
 1 + 0.8 + 1 + 1 -   = 4

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER					ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	1	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation	
0 almost no, irrelevant	some relevant, aimed at resolving some unclear points	0 almost no	almost nothing	no or irrelevant	almost no	no	0 almost no	irrelevant	very little	almost no	no	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1		1 very little	some main points	few	some	almost no	1 little	some	some	to some extent	almost no	
2	short allowing short answers, prioritized, all time used	2 not all	main points	some	to important topics	some	2 partial	average	some correct	leading or cooperative	some	
		3 almost all	all relevant points	many	to most topics	reasonable	3 good	many	many correct	quite efficient	reasonable	
		4 all & efficiently	practically all points	practically all	+ improvement suggestions	very good	4 new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good	

NOTES:

REVIEWER Start from 1 and add/subtract  
 1 + 2 + 1 + 1 -   = 5

QUESTIONS ASKED		REVIEW OF REPORT					REVIEW OF OPPOSITION					ANSWERS TO JURY QUESTIONS
0	1	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	speech summary	discussion analysis	own opinions	pros & cons	prioritisation	
0 too few, mostly irrelevant	some relevant, sufficient number, could clear things out	0 poor	almost no	too few	irrelevant	no	0 poor	almost no	too few	irrelevant	no	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1		1 partial	too short/long	some	partially relevant	almost no	1 too short/long	too short/long	some	partially relevant	almost no	
2	most time used, many unclear points resolved, aimed at both rep. and opp.	2 good	relevant parts	many	mostly adequate	some	2 informative, apt	relevant parts	many	mostly adequate	some	
3	+short, apt and clear, well prioritized time managed efficiently	3 detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good	3 brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good	

NOTES:



Juror	Team	Stage 1			Stage 2			Stage 3			Stage 4		
		Australia Rep	Hungary Opp	Sweden Rev	Hungary Rep	Sweden Opp	Australia Rev	Sweden Rep	Australia Opp	Hungary Rev	Rep	Opp	Rev
Feng Song		5	6	6	5	6	6	6	6	7			
Matěj Bařin		5	6	6	8	6	7	6	6	6			
Uwee Look Yue		7	6	5	8	6	8	6	8	8			
Attila Kovács		5	6	8	7	5	6	7	5	7			
Tomasz Opaczyński		6	7	7	9	5	6	6	4	5			
Acting Team Member		Xuan-Nghi Pham			Tímea Bánóczyki			Eric Bojs					
		Balázs Norbert Nagy			Daniel Javadinejad			Daniel Campbell					
		William Kocap			Thejeswaran Elankayer			Balázs Norbert Nagy					
Rejected Problems		NIL			NIL			NIL					
Accepted Problem		9. Ball in a tube			2. Balloon airhorn			15. Boiled Egg					

Signature Fight Assistant: ..... Double-checked with Scoring Guidelines by second Fight Assistant (signature): .....