





**SCORESHEET**

stage: reporter: Belarus  
 opponent: Marou  
 reviewer: Russia  
 fight (round no.):  
 room:  
 problem no.: I want  
 juror's name: Mubtash  
 juror's signature: Mubtash

REPORT		DISCUSSION WITH OPONENT		DISCUSSION WITH REPORTER		ANSWERS TO JURY	
phenomenon	explanation	theory/model	relevant	scientific contribution	relevance of own opinions	efficiency	priority
0 almost no	0 almost no	0 almost no	0 almost no	0 almost no	0 almost no	0 almost no	0 almost no
1 some	1 fair	1 some	1 fair	1 irrelevant	1 some	1 to some extent	1 almost no
2 some	2 fair	2 some	2 well performed, sufficient number	2 irrelevant	2 average	2 to some extent	2 almost no
3 good	3 good	3 good	3 well performed, sufficient number + results explained	2 partial	2 some	2 to some extent	2 almost no
4 detailed	4 detailed	4 detailed	4 quite detailed, errors analysed	1 little	1 some	1 to some extent	1 almost no
5 deep and comprehensive	5 deep and comprehensive	5 deep and comprehensive	5 + results explained, errors analysed, + reproducible, completely testable	0 almost no	0 almost no	0 almost no	0 almost no
6 shows physical insight	6 shows physical insight	6 shows physical insight	6 completely testable, complex, analysed	1 little	1 some	1 to some extent	1 almost no

Start from 1 and add/subtract  
 $1 + 4.5 - 3 + 1.5 = 8.5$   
 $8.5 - 0.5 = 8$

NOTES:  
 young models  
 excellent

OPONENT  
 Start from 1 and add/subtract  
 $1 + 1.5 + 4.5 - 3 + 1.5 = 7.5$   
 $7.5 - 0.5 = 7$

No view of non-view  
 the manner to group data was terrific  
 Very deliberate  
 Deliberate  
 good counter point

DISCUSSION WITH REPORTER		DISCUSSION WITH OPONENT		ANSWERS TO JURY and REVIEWER'S QUESTIONS		ANSWERS TO JURY	
time used	understanding of relevant topics	correct own opinions expressed	scientific contribution of topics presented	efficiency	priority	0 concise and correct or	0 concise and correct or
0 almost no, irrelevant	0 almost no	0 almost no	0 almost no	0 almost no	0 almost no	0 almost no	0 almost no
1 very little	1 some main points	1 few	1 irrelevant	1 almost no	1 almost no	1 some incorrect,	1 some incorrect,
2 not all	2 main points	2 some	2 average	2 to some extent	2 to some extent	2 inconclusive or too long	2 inconclusive or too long
3 almost all	3 all relevant points	3 many	3 many correct	3 quite efficient	3 quite efficient	3 deeply incorrect or show	3 deeply incorrect or show
4 all & efficiently	4 practically all points	4 practically all	4 many correct	4 very efficient	4 very efficient	4 deep misconceptions	4 deep misconceptions

REVIEWER  
 Start from 1 and add/subtract  
 $1 + 2.5 + 4.5 - 3 + 1.5 = 7$   
 $7 - 0.5 = 6.5$   
 Arguing over how defined problem  
 v. good on ultimate context  
 Nice quote about limit on N.N.F. (23)

QUESTIONS ASKED		REVIEW OF REPORT		REVIEW OF OPPOSITION		ANSWERS TO JURY	
0 too few, mostly irrelevant	0 poor	0 almost no	0 almost no	0 almost no	0 almost no	0 concise and correct or	0 concise and correct or
1 clear things out	1 poor	1 too few	1 too few	1 poor	1 too few	1 no questions asked	1 no questions asked
2 some relevant, sufficient number, could	2 report summary & understanding	2 own opinions	2 own opinions	2 discussion analysis	2 discussion analysis	2 some incorrect,	2 some incorrect,
3 most time used, many unclear points	3 partial	3 too short/long	3 too short/long	3 almost no	3 almost no	3 no questions asked	3 no questions asked
4 resolved, aimed at both rep. and opp.	4 good	4 mostly adequate	4 mostly adequate	4 mostly adequate	4 mostly adequate	4 inconclusive or too long	4 inconclusive or too long
5 short, apt and clear, well prioritized	5 detailed	5 accurate, + improvement	5 accurate, + improvement	5 accurate, + improvement	5 accurate, + improvement	5 deeply incorrect or show	5 deeply incorrect or show
6 time managed efficiently	6 complex	6 conclusive, + improvement	6 conclusive, + improvement	6 conclusive, + improvement	6 conclusive, + improvement	6 deep misconceptions	6 deep misconceptions

NOTES:  
 I + 3 Not my job  
 to 5 with 2 words?  
 Discuss in 1/2 of sheet

**SCORESHEET**

stage: II reporter: Ilya Zotchenko (Belarus) opponent: fight (round no.): 2nd room: € reviewer: (Russia) problem no.: 1 Juror's name: MAREK BABIN signature: Malyi D.S.

REPORTER  
Start from 1 and add/subtract  
1 + 3 + (1.5) - 0 = 5

REPORT	phenomenon	theory/model	experiments	relevant	comparison between own contribution	task fulfillment
0	almost no explanation	almost no theory/model	almost no experiments	no/almost no relevant	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	average
3	good	good	well performed	adequately analysed	some interesting results	interesting
4	detailed	quite detailed, correct	+ results explained	+ theory limits explained, conclusive	considerable experimental	some aspects
5	demonstrative	detailed, complex	errors analysed	+ reproducible, analysed, conclusive	considerable experimental	above average
6	deep and comprehensive	completely testable	convincing analysis	well fitting, deviations analysed, conclusive	greater extent than expected	greater extent than expected

DISCUSSION WITH OPONENT	scientific contribution	relevant arguments/responses	efficiency
0	almost no scientific contribution	too few arguments/responses	almost no, chaotic
1	almost no scientific contribution	some	avoided some
2	some scientific points cleared	many	cooperated well
3	interesting points discussed	+ data/theory convincingly supported	answered directly
4	brought in new physics	proved deep understanding	efficient, productive

DISCUSSION WITH REPORTER	scientific relevance	own opinions	efficiency	prioritisation
0	almost no scientific contribution of topics presented	irrelevant	very little	no
1	almost no scientific contribution of topics presented	irrelevant	little	almost no
2	partial	average	some correct	leading or cooperative
3	good	many	many correct	quite efficient
4	new crucial points	almost all suggestions	very efficient	very good

OPPOSITION (SPEECH)	relevant topics	correct own opinions expressed	understanding of presentation	time used
0	almost no relevant topics	almost no correct own opinions expressed	almost no understanding of presentation	almost no, irrelevant
1	some	some	some	some unclear points
2	to important topics	to important topics	many	short allowing short answers, prioritized, all time used
3	to most topics	to most topics	all relevant points	almost all
4	practically all points	practically all points	efficiently	all & almost all

REVIEW OF REPORT	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	partial	too short/long	some	partially relevant	almost no
2	good	relevant parts	many	mostly adequate	some
3	detailed, concise, accurate, + improvements	relevant parts, concise, accurate, + improvements	many	fully	good

QUESTIONS ASKED

0 - too few, mostly irrelevant  
1 - clear things out  
2 - most time used, many unclear points resolved, aimed at both rep. and opp.  
3 - +short, apt and clear, well prioritized time managed efficiently

QUESTIONS ASKED

0 - almost no, irrelevant  
1 - some relevant, aimed at resolving some unclear points  
2 - short allowing short answers, prioritized, all time used  
3 - almost all  
4 - all & almost all

REVIEWER

Start from 1 and add/subtract  
1 + 1 + 1 + 0 = 5

QUESTIONS ASKED

0 - too few, mostly irrelevant  
1 - clear things out  
2 - most time used, many unclear points resolved, aimed at both rep. and opp.  
3 - +short, apt and clear, well prioritized time managed efficiently

QUESTIONS ASKED

0 - almost no, irrelevant  
1 - some relevant, aimed at resolving some unclear points  
2 - short allowing short answers, prioritized, all time used  
3 - almost all  
4 - all & almost all

REVIEWER

Start from 1 and add/subtract  
1 + 1 + 1 + 0 = 5

QUESTIONS TO JURY

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

ANSWERS TO JURY

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

**SCORESHEET**

stage: 2  
 reporter: BRADUS  
 opponent: MARCO  
 fight (round no.): 2  
 room: E  
 reviewer: BSSRFA  
 problem no.: 1  
 Juror's name: *Alric*  
 signature: *Alric*

REPORTER  
 Start from 1 and add/subtract  
 1 + 4 - 1 = 7

REPORT	phenomenon	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment
0	explanation	almost no	almost no	no/almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	average
3	good	good	well performed, sufficient number	deviations	some interesting results	interesting
4	detailed	quite detailed,	results explained	+ theory limits	considerable experimental	some aspects
5	demonstrative	correct	errors analysed	explained, conclusive	considerable experimental	above average
6	deep and comprehensible,	detailed, complex,	+ reproducible,	well fitting, deviations	considerable experimental	greater extent
	shows physical insight	completely testable	convincing analysis	analysed, conclusive	and theoretical	than expected

NOTES: \*very detailed analysis of the problem and possible ways to solve it and source details, all devices tested properly  
 + good comparison of size/force, etc (perhaps why #1)  
 + good comparison between solutions

DISCUSSION WITH OPONENT

efficiency	relevant arguments/responses	scientific contribution	physics brought in new	proved deep understanding	productive
0	almost no, chaotic	almost no	almost no	too few	avoided some questions
1	some	only technical	points cleared	some	cooperated well
2	many	some scientific points cleared	interesting points	many	cooperated well
3	answered directly	+ data/theory	convincingly supported	convincingly supported	answered directly
4	efficient, productive	proven deep understanding	brought in new physics	proved deep understanding	efficient, productive

OPONENT AND REVIEWER'S QUESTIONS

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

OPONENT  
 Start from 1 and add/subtract  
 1 + 1.5 + 1.5 + 1 = 5

QUESTIONS ASKED

almost no, irrelevant	some relevant, aimed at resolving	short allowing short answers, prioritized, all time used
0	almost no	short allowing short answers, prioritized, all time used
1	some relevant, aimed at resolving	short allowing short answers, prioritized, all time used
2	short allowing short answers, prioritized, all time used	short allowing short answers, prioritized, all time used

NOTES:  
 - covered area raised

DISCUSSION WITH REPORTER

time used	understanding of relevant topics	correct own options expressed	scientific relevance	own opinions presented	efficiency	priority
0	almost no	almost no	almost no	almost no	almost no	no
1	very little	few	little	some	to some extent	almost no
2	some main points	some	average	some correct	leading or cooperative	some
3	all relevant points	many	good	many correct	quite efficient	reasonable
4	efficiently all & all	practically all	practically all	almost all	very efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

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

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

QUESTIONS ASKED

too few, mostly irrelevant	some relevant, sufficient number, could	clear things out	most time used, many unclear points	resolved, aimed at both rep. and opp.	+short, apt and clear, well prioritized	time managed efficiently
0	too few, mostly irrelevant <td>clear things out <td>most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td></td></td>	clear things out <td>most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td></td>	most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td>	resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td>	+short, apt and clear, well prioritized <td>time managed efficiently </td>	time managed efficiently
1	some relevant, sufficient number, could <td>clear things out <td>most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td></td></td>	clear things out <td>most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td></td>	most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td>	resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td>	+short, apt and clear, well prioritized <td>time managed efficiently </td>	time managed efficiently
2	some relevant, sufficient number, could <td>clear things out <td>most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td></td></td>	clear things out <td>most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td></td>	most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td>	resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td>	+short, apt and clear, well prioritized <td>time managed efficiently </td>	time managed efficiently
3	some relevant, sufficient number, could <td>clear things out <td>most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td></td></td>	clear things out <td>most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td></td>	most time used, many unclear points <td>resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td></td>	resolved, aimed at both rep. and opp. <td>+short, apt and clear, well prioritized <td>time managed efficiently </td></td>	+short, apt and clear, well prioritized <td>time managed efficiently </td>	time managed efficiently

NOTES:

REVIEW OF REPORT

report summary & understanding	discussion analysis	own opinions	pros & cons	priority
0	almost no	too few	irrelevant	no
1	poor	too short/long	partially relevant	almost no
2	good	relevant parts	mostly adequate	some
3	detailed, accurate, conclusive,	+ improvement	fully	good

REVIEW OF OPPOSITION

speech summary	discussion analysis	own opinions	pros & cons	priority
0	almost no	too few	irrelevant	no
1	poor	too short/long	partially relevant	almost no
2	informative, apt	relevant parts	mostly adequate	some
3	brief but accurate, conclusive,	+ improvement	fully	good

ANSWERS TO JURY

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

**SCORESHEET**

stage: 2 reporter: Belarus opponent: Macao fight (round no.): 2 room: F reviewer: Russia

Juror's name: Anderson signature: AL AP

problem no.: 7

**REPORTER**

Start from 1 and add/subtract

1 + 24 + 1.5 - 0.5 = 41.5

11.5

REPORT

6	deep and comprehensible	detailed, complex, + reproducible, errors analysed	explained, conclusive + theory limits	considerable experimental or theoretical	considerable experimental and theoretical	well fitting, deviations analysed, conclusive	convincing analysis	completely testable	shows physical insight
5	demonstrative	quite detailed, + results explained	+ results explained	considerable experimental	considerable experimental	explained, conclusive + theory limits	+ reproducible, errors analysed	detailed, complex, + reproducible, errors analysed	deep and comprehensible
4	detailed	sufficient number, well performed, good	sufficient number, well performed, good	some interesting results	some interesting results	qualitatively analysed deviations	well performed, deviations	quite detailed, + results explained	detailed
3	good	fair	fair	some own input	some own input	not well fitting	good	quite detailed, + results explained	demonstrative
2	some	some	some	review of sources, cited partly	review of sources, cited partly	some	fair	quite detailed, + results explained	detailed
1	almost no	almost no	almost no	others' data, incorrectly cited	others' data, incorrectly cited	no/almost no	too few	almost no	almost no
0	explanation	theory/model	theory and experiment	task fulfillment	own contribution	comparison between	relevant experiments	theory/model	phenomenon

NOTES:

Various approaches but all fairly standard = novelty?

**OPONENT**

Start from 1 and add/subtract

1 + 1 + 2 + 2.5 - 0 = 6.5

NOTES:

4	time used	understanding of relevant topics	correct own	scientific	relevance	own opinions	efficiency	priority
3	almost all	all relevant points	many	to most topics	practically all	+ improvement	quite efficient	reasonable
2	not all	main points	some	to important topics	many	many correct	leading or cooperative	some
1	very little	some main points	few	some	partial	average	some correct	almost no
0	almost no	almost nothing	almost no	almost no	little	irrelevant	very little	no

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

0 --- concise and correct or no questions asked

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

-2 --- deeply incorrect or show deep misconceptions

QUESTIONS ASKED

OPPOSITION (SPEECH)

DISCUSSION WITH REPORTER

**REVIEWER**

Start from 1 and add/subtract

1 + 1.5 + 2 + 1.5 = 6.5

QUESTIONS ASKED

REVIEW OF REPORT

REVIEW OF OPPOSITION

3	report summary & understanding	discussion	own opinions	pros & cons	priority
2	relevant parts	+ improvement	accurate, conclusive	fully	good
1	too short/long	some	too short/long	partially relevant	almost no
0	poor	almost no	poor	irrelevant	no

**ANSWERS TO JURY**

0 --- concise and correct or no questions asked

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

-2 --- deeply incorrect or show deep misconceptions

NOTES:

0 --- too few, mostly irrelevant

1 --- clear things out

2 --- most time used, many unclear points resolved, aimed at both rep. and opp.

3 --- +short, apt and clear, well prioritized

time managed efficiently

**SCORESHEET**

stage: reporter: Russia opponent: Balarus reviewer: Macao  
 fight (round no.): 2 room: E problem no.: 9  
 Juror's name: McCoatters signature:

REPORTER  
 Start from 1 and add/subtract  
 $1 + 3.5 + 1.5 - 0.5 = 6.5$

REPORT

phenomenon	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment
0: almost no explanation	1: some	1: almost no	1: no/almost no	1: review of sources, cited	0: misunderstood
2: fair	2: fair	2: some	2: not well fitting	2: some own input	1: partly
3: good	3: good	3: well performed, sufficient number	3: qualitatively analysed	3: some interesting results	2: interesting
4: detailed	4: quite detailed, correct	4: + results explained	4: + explanatory + theory limits	4: considerable experimental	3: some aspects
5: demonstrative	5: correct	5: errors analysed	5: explained, conclusive	5: or theoretical	4: above average
6: deep and comprehensible, shows physical insight	6: detailed, complex, completely testable	6: convincing analysis	6: well fitting, deviations analysed, conclusive	6: considerable experimental and theoretical	6: than expected

NOTES:

Hard to follow diagrams  
 Role of Does not count?  
 Numerical for related

OPONENT  
 Start from 1 and add/subtract  
 $1 + 2 + 2.5 - 0 = 5.5$   
 Since is hard to understand  
 Explain why role of does not matter  
 why?

time used	understanding of relevant topics	correct own opinions expressed	scientific relevance	own opinions presented	efficiency
0: almost no	0: almost nothing	0: no or irrelevant	0: almost no contribution of topics	0: very little	0: almost no
1: very little	1: some main points	1: few	1: little	1: some	1: almost no
2: not all	2: all relevant points	2: some	2: average	2: some correct	2: to some extent
3: almost all	3: all relevant points	3: many	3: good	3: many points	3: quite efficient
4: all & efficiently	4: practically all points	4: practically all	4: new crucial points	4: almost all suggestions	4: very efficient

NOTES:

REVIEWER  
 Start from 1 and add/subtract  
 $1 + 1 + 1 - 1 = 2$   
 Future Boss Party copy?

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	priority
0: too few, mostly irrelevant	0: almost no	0: almost no	0: too few	0: irrelevant	0: almost no
1: clear things out	1: poor	1: too short/long	1: some	1: partially relevant	1: almost no
2: most time used, many unclear points	2: resolved, aimed at both rep. and opp.	2: good	2: many	2: mostly adequate	2: some
3: +short, apt and clear, well prioritized	3: time managed efficiently	3: detailed, complex	3: accurate, + improvements	3: fully adequate	3: good

NOTES:

ANSWERS TO JURY  
 QUESTIONS  
 0: concise and correct or no questions asked  
 1: some incorrect, inconclusive or too long  
 2: deeply incorrect or show deep misconceptions

REVIEW OF OPPOSITION

REVIEW OF REPORT

**SCORESHEET**

stage: 1  
 reporter: Russia  
 opponent: Belarus  
 fight (round no.): 2  
 room: E  
 reviewer: Macao  
 problem no.: 9  
 Juror's name: Allison  
 signature: M. H.

**REPORTER**

Start from 1 and add/subtract

1 + 3.5 + 2 = 6.5 = 6

Nikita

REPORT

NOTES:

0	almost no	almost no	theory/model	relevant experiments	no/almost no	others' data, incorrectly cited	misunderstood
1	some	some	fair	some	not well fitting	review of sources, cited	partly
2	fair	fair	fair	well performed,	debatable	some interesting results	average
3	good	good	good	sufficient number	qualitatively analysed	interesting	average
4	detailed	detailed	detailed	+ results explained	+ theory limits	interesting points cleared	some scientific points cleared
5	demonstrative	quite detailed,	errors analysed	explained, conclusive	considerable experimental	discussed	discussed
6	deep and comprehensive	detailed, complex,	convincing analysis,	well fitting, deviations	considerable experimental	brought in new physics	proven deep understanding
	shows physical insight	completely testable	convincing analysis	analysed, conclusive	and theoretical		productive

ANSWERS TO JURY, OPONENT and REVIEWER'S QUESTIONS

DISCUSSION WITH OPONENT

0	almost no, chaotic	efficiency	relevance	scientific contribution	almost no	only technical	almost no
1	avoided some	efficiency	relevance	scientific contribution	some	some technical	some
2	questions cooperated well	efficiency	relevance	scientific contribution	many	points cleared	many
3	answered directly	efficiency	relevance	scientific contribution	many	points cleared	many
4	to most questions	efficiency	relevance	scientific contribution	many	points cleared	many
5	efficient, productive	efficiency	relevance	scientific contribution	many	points cleared	many
6	deep misconceptions	efficiency	relevance	scientific contribution	many	points cleared	many

**OPONENT**

Start from 1 and add/subtract

1 + 1.5 + 2 + 2 = 6.5 = 6

Glób

QUESTIONS ASKED

NOTES:

0	almost no, irrelevant	time used	understanding of	relevant topics	correct own	priority
1	some relevant, aimed at resolving	almost no	presentation	no or irrelevant	almost no	priority
2	short allowing short answers,	very little	some main points	few	little	priority
3	prioritized, all time used	almost all	all relevant points	many	quite efficient	priority
4		all & efficiently	practically all points	practically all	very efficient	priority

ANSWERS TO JURY and REVIEWER'S QUESTIONS

DISCUSSION WITH REPORTER

0	no	almost no	relevance	scientific contribution of topics presented	almost no	very little	almost no
1	some	some	relevance	scientific contribution of topics presented	some	very little	some
2	some	some	relevance	scientific contribution of topics presented	some	very little	some
3	reasonable	some	relevance	scientific contribution of topics presented	some	very little	some
4	reasonable	some	relevance	scientific contribution of topics presented	some	very little	some
5	reasonable	some	relevance	scientific contribution of topics presented	some	very little	some
6	reasonable	some	relevance	scientific contribution of topics presented	some	very little	some

**REVIEWER**

Start from 1 and add/subtract

1 + 2.5 + 1.5 + 1 = 6

QUESTIONS ASKED

NOTES:

0	too few, mostly irrelevant	report summary & understanding	discussion analysis	own opinions	pros & cons	priority
1	clear things out	poor	almost no	too few	irrelevant	priority
2	some relevant, sufficient number, could	partial	too short/long	some	partially relevant	priority
3	most time used, many unclear points	good	relevant parts	many	mostly adequate	priority
4	resolved, aimed at both rep. and opp.	detailed,	relevant parts	many	mostly adequate	priority
5	+short, apt and clear, well prioritized	complex,	accurate,	+ improvements	fully	priority
6	time managed efficiently	3	conclusive,	+ improvements	adequate	priority

ANSWERS TO JURY

REVIEW OF REPORT

0	no	irrelevant	discussion analysis	own opinions	pros & cons	priority
1	no	irrelevant	almost no	too few	irrelevant	priority
2	some	partially relevant	too short/long	some	partially relevant	priority
3	some	partially relevant	too short/long	some	partially relevant	priority
4	some	partially relevant	too short/long	some	partially relevant	priority
5	some	partially relevant	too short/long	some	partially relevant	priority
6	some	partially relevant	too short/long	some	partially relevant	priority

REVIEW OF OPPOSITION

0	speech summary	discussion analysis	own opinions	pros & cons	priority
1	poor	almost no	too few	irrelevant	priority
2	informative, apt	relevant parts	many	mostly adequate	priority
3	brief but accurate,	conclusive,	+ improvements	fully	priority
4	new crucial point(s)	almost all	many	many correct	priority
5	new crucial point(s)	almost all	many	many correct	priority
6	new crucial point(s)	almost all	many	many correct	priority

asked prior



**SCORESHEET**

stage: 1  
 reporter: Nisha Khatol  
 opponent: Shiv Agnihotri  
 fight (round no.): 2nd  
 room: E  
 reviewer: Ka Wing Chung  
 problem no.: 9 in tube  
 Juror's name: WATER BABY IN  
 signature: Mary Bakin

REPORTER:  $1 + (1.5 \times 2) + 2 - 0 = 6$   
 Start from 1 and add/subtract

REPORT	phenomenon	explanation	theory/model	experiments	relevant	comparison between theory and experiment	own contribution	task fulfillment
0	almost no	almost no	almost no	too few	no/almost no	others' data, incorrectly cited	misunderstood	no
1	some	some	some	some	some	review of sources, cited	partly	partly
2	fair	fair	fair	fair	not well fitting	some interesting results	interesting	average
3	good	good	good	good	decent	some interesting results	interesting	average
4	detailed	detailed	detailed	detailed	convincing number	qualitatively analysed	interesting	average
5	deep and comprehensible	quite detailed,	correct	errors analysed,	well fitting, deviations	explained, concise	some aspects	above average
6	shows physical insight	completely testable,	detailed, complex,	reproducible,	analysed, conclusive	considerable experimental	greater extent	than expected

DISCUSSION WITH OPONENT	efficiency	relevant arguments/responses	scientific contribution	almost no	only technical	points cleared	some scientific	interesting	points cleared	interesting points	+ data/theory	answered directly	to most questions	efficient, productive
0	almost no, chaotic	too few	almost no	almost no	only technical	points cleared	some scientific	interesting	points cleared	interesting points	+ data/theory	answered directly	to most questions	efficient, productive
1	avoided some questions	some	almost no	very little	only technical	points cleared	some scientific	interesting	points cleared	interesting points	+ data/theory	answered directly	to most questions	efficient, productive
2	cooperated well	many	some	some	only technical	points cleared	some scientific	interesting	points cleared	interesting points	+ data/theory	answered directly	to most questions	efficient, productive
3	cooperated well	many	some	some	only technical	points cleared	some scientific	interesting	points cleared	interesting points	+ data/theory	answered directly	to most questions	efficient, productive
4	cooperated well	many	some	some	only technical	points cleared	some scientific	interesting	points cleared	interesting points	+ data/theory	answered directly	to most questions	efficient, productive

QUESTIONS ASKED	almost no, irrelevant	some relevant, aimed at resolving	short allowing short answers,	prioritized, all time used
0	almost no	almost nothing	some main points	very little
1	almost no	some	few	very little
2	some	to important topics	some	main points
3	reasonable	to most topics	many	all relevant points
4	very good	practically all points	practically all points	efficiently

ANSWERS TO JURY and REVIEWER'S QUESTIONS	no <th>almost no <th>some <th>reasonable</th> <th>very good</th> </th></th>	almost no <th>some <th>reasonable</th> <th>very good</th> </th>	some <th>reasonable</th> <th>very good</th>	reasonable	very good
0	no	almost no	some	reasonable	very good
1	no	almost no	some	reasonable	very good
2	no	almost no	some	reasonable	very good

QUESTIONS ASKED	almost no, irrelevant	some relevant, aimed at resolving	short allowing short answers,	prioritized, all time used
0	almost no	almost no	some main points	very little
1	almost no	some	few	very little
2	some	to important topics	some	main points
3	reasonable	to most topics	many	all relevant points
4	very good	practically all points	practically all points	efficiently

ANSWERS TO JURY and REVIEWER'S QUESTIONS	no <th>almost no <th>some <th>reasonable</th> <th>very good</th> </th></th>	almost no <th>some <th>reasonable</th> <th>very good</th> </th>	some <th>reasonable</th> <th>very good</th>	reasonable	very good
0	no	almost no	some	reasonable	very good
1	no	almost no	some	reasonable	very good
2	no	almost no	some	reasonable	very good

QUESTIONS ASKED	almost no, irrelevant	some relevant, sufficient number, could	clear things out	most time used, many unclear points	resolved, aimed at both rep. and opp.	+short, apt and clear, well prioritized	time managed efficiently
0	almost no	almost no	clear things out	most time used, many unclear points	resolved, aimed at both rep. and opp.	+short, apt and clear, well prioritized	time managed efficiently
1	almost no	some	clear things out	most time used, many unclear points	resolved, aimed at both rep. and opp.	+short, apt and clear, well prioritized	time managed efficiently
2	some	to short/long	clear things out	most time used, many unclear points	resolved, aimed at both rep. and opp.	+short, apt and clear, well prioritized	time managed efficiently
3	good	to short/long	clear things out	most time used, many unclear points	resolved, aimed at both rep. and opp.	+short, apt and clear, well prioritized	time managed efficiently

ANSWERS TO JURY	no <th>almost no <th>some <th>adequate <th>fully <th>good</th> </th></th></th></th>	almost no <th>some <th>adequate <th>fully <th>good</th> </th></th></th>	some <th>adequate <th>fully <th>good</th> </th></th>	adequate <th>fully <th>good</th> </th>	fully <th>good</th>	good
0	no	almost no	some	adequate	fully	good
1	no	almost no	some	adequate	fully	good
2	no	almost no	some	adequate	fully	good

**REPORTER**  
 1 + (1.5 × 2) + 2 - 0 = 6  
 Start from 1 and add/subtract

**OPPONENT**  
 1 + 1 + 2 - 0 = 4  
 Start from 1 and add/subtract

**REVIEWER**  
 1 + (0.5 × 1) + 0.5 + 0.5 = 3  
 Start from 1 and add/subtract

**QUESTIONS ASKED**  
 0 - too few, mostly irrelevant  
 0.5 - some relevant, sufficient number, could  
 1 - clear things out  
 2 - most time used, many unclear points  
 2 - resolved, aimed at both rep. and opp.  
 3 - +short, apt and clear, well prioritized  
 3 - time managed efficiently

**ANSWERS TO JURY and REVIEWER'S QUESTIONS**  
 0 - concise and correct or no questions asked  
 1 - some incorrect, inconclusive or too long  
 2 - deeply incorrect or show deep misconceptions

**DISCUSSION WITH REPORTER**  
 0 - no  
 1 - almost no  
 2 - partial  
 3 - good  
 4 - new crucial point(s)

**DISCUSSION WITH OPONENT**  
 0 - almost no, chaotic  
 1 - avoided some questions  
 2 - cooperated well  
 3 - answered directly  
 4 - to most questions

**REVIEW OF REPORT**  
 0 - almost no  
 0.5 - too few  
 1 - partially relevant  
 2 - mostly adequate  
 3 - fully

**REVIEW OF OPPOSITION**  
 0 - speech summary  
 1 - discussion analysis  
 2 - relevant parts  
 3 - accurate, conclusive, + improvement  
 4 - brief but accurate, conclusive, + improvement

**SCORESHEET**

stage: 2 reporter: Bonus opponent: Mico room: E problem no.: 1  
 Juror's name: Wee Wei Hwang signature: HW

REPORTER  
 Start from 1 and add/subtract  
 $1 + 35 + 2 - 0 = 37$

REPORT

NOTES: (1) - covered previous model. (2) - Star (physical) stars. (3) - jellies contain (4) Not relevant. Fluid shell - Qualitative exp. - variation of eggs if not considered? many aspects. Hard in exp. But in fact there are no further quantities (circularity)

0	phenomenon	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment
	almost no	almost no	some	no/almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	not well fitting	review of sources, cited	partly
2	fair	fair	fair	deviations	some own input	average
3	good	good	well performed, sufficient number	qualitatively analysed	some interesting results	interesting
4	detailed	quite detailed,	+ results explained	+ theory limits	considerable experimental	some aspects
5	demonstrative	detailed, correct	errors analysed	explaining, concise	or theoretical	above average
6	deep and comprehensible	detailed, complex,	+ reproducible,	well fitting, deviations	considerable experimental	greater extent
	shows physical insight	completely testable	convincing analysis	analysed, conclusive	and theoretical	than expected

DISCUSSION WITH OPONENT

0	efficiency	relevant arguments/responses	scientific contribution
	almost no, chaotic	too few	almost no
1	avoided some questions	some	only technical
2	cooperated well	many	points cleared
3	answered directly	+ data/theory	interesting points
4	to most questions	convincingly supported	discussed
	efficient, productive	proved deep understanding	brought in new physics

ANSWERS TO JURY, OPONENT and REVIEWER'S QUESTIONS

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

OPONENT  
 Start from 1 and add/subtract  
 $1 + 0.8 + 0.8 + 0.8 - 0.1 = 3.3$

QUESTIONS ASKED

NOTES: almost no, irrelevant  
 1 - some relevant, aimed at resolving some unclear points  
 2 - short allowing short answers, prioritized, all time used  
 3 - almost all  
 4 - all & efficiently

0	time used	understanding of relevant topics	correct own opinions expressed	priority
	almost no	almost nothing	no or irrelevant	no
1	very little	some main points	some	almost no
2	not all	all relevant points	many	reasonable
3	almost all	practically all points	practically all	very good
4	all & efficiently	practically all points	practically all	very good

DISCUSSION WITH REPORTER

0	efficiency	own opinions presented	scientific relevance	contribution of topics
	almost no	almost no	very little	irrelevant
1	to some extent	some	some	little
2	leading or cooperative	some correct	average	partial
3	quite efficient	many correct	many	good
4	very efficient	+ improvement suggestions	almost all	new crucial point(s)

ANSWERS TO JURY and REVIEWER'S QUESTIONS

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

REVIEWER  
 Start from 1 and add/subtract  
 $1 + 1 + 0.8 + 0.5 - 0 = 3.3$

QUESTIONS ASKED

NOTES: too few, mostly irrelevant  
 0 - some relevant, sufficient number, could clear things out  
 1 - most time used, many unclear points resolved, aimed at both rep. and opp.  
 2 - +short, apt and clear, well prioritized  
 3 - time managed efficiently

0	report summary & understanding	discussion analysis	own opinions	pros & cons	priority
	almost no	almost no	too few	irrelevant	no
1	poor	partial	too short/long	partially relevant	almost no
2	good	relevant parts	many	mostly adequate	some
3	detailed, complex	accurate, concise,	+ improvement suggestions	fully	good

REVIEW OF REPORT

0	speech summary	discussion analysis	own opinions	pros & cons	priority
	almost no	almost no	too few	irrelevant	no
1	poor	too short/long	too short/long	partially relevant	almost no
2	informative, apt	relevant parts	many	mostly adequate	some
3	brief but accurate	conclusive, accurate,	+ improvement suggestions	fully	good

REVIEW OF OPPOSITION

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

ANSWERS TO JURY

good point for the option  
 conversation of non-relevant fluid.  
 - presence of fluid implies shorted would be less relevant?  
 where is it?

NOTES: Definitively of non-relevant fluid?  
 Differences of eggs & continuation  
 of different sizes  
 of continuation?

## SCORESHEET

reporter: **MARTO**      opponent: **ROSSIAK**      room: **E**      problem no.: **8**  
 stage: **3**      fight (round no.): **2**      reviewer: **BARROS**

Juror's name: **Alexandra**      signature: **Alexandra**

REPORTER      Start from 1 and add/subtract      1 + 0 = 1 - 0.5 = 0.5 = 3

REPORT	phenomenon	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment
0	explanation	almost no	almost no	no/almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	average
3	good	good	well performed, sufficient number	deviations	some interesting results	interesting solution
4	detailed	quite detailed, correct	+ results explained, errors analysed	+ theory limits explained, conclusive	qualitatively analysed	interesting points
5	demonstrative	detailed, complex, convincing	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental or theoretical	discussed
6	deep and comprehensive	shows physical insight	completely testable	comprehensible experimental and theoretical	considerable experimental and theoretical	greater extent than expected

NOTES: 3 reports that we run through → 1 point left about error unclear low + overall very difficult to follow if wanted use a lot of math and equations. → 1 in the quantitative variation, but we have to read/understand → a bit more of data

DISCUSSION WITH OPONENT	relevant arguments/responses	scientific contribution	almost no	only technical	some scientific points cleared	interesting points	brought in new physics	proved deep understanding	efficient, productive
0	almost no, chaotic	almost no	almost no	almost no	some cleared	some cleared	almost no	too few	avoided some
1	questions	some	some	some	some cleared	some cleared	some	many	cooperated well
2	cooperated well	many	many	many	many cleared	many cleared	many	many	cooperated well
3	answered directly	+ data/theory	convincingly supported	+ data/theory	convincingly supported	convincingly supported	convincingly supported	convincingly supported	answered directly
4	very good	very efficient	very efficient	very efficient	very efficient	very efficient	very efficient	very efficient	very good

DISCUSSION WITH REPORTER

NOTES: raised variety of important issues - look for explanations, look for underlying issues

OPPONENT      Start from 1 and add/subtract      1 + 1.5 = 2.5 - 0.5 = 2 = 6

DISCUSSION WITH REPORTER	correct own opinion expressed	relevant topics	addressed	options expressed	almost no	no	scientific contribution of topics presented	own opinions	efficiency	prioritisation
0	almost no	almost no	almost no	almost no	almost no	almost no	almost no	almost no	almost no	no
1	very little	some main points	some	some	some	some	some	some	to some extent	almost no
2	all relevant points	many	many	many	many	many	many	many	many correct	reading or cooperative
3	almost all	all relevant points	to most topics	to most topics	to most topics	to most topics	to most topics	to most topics	many correct	quite efficient
4	efficiently	practically all points	practically all	practically all	practically all	practically all	practically all	practically all	many correct	very efficient

ANSWERS TO JURY and REVIEWER'S QUESTIONS

REVIEWER      Start from 1 and add/subtract      1 + 1.5 = 2.5 + 0.5 = 3 = 7

REVIEW OF REPORT	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	partial	too short/long	some	partially relevant	almost no
2	good	relevant parts	many	mostly adequate	some
3	detailed, complex	accurate, conclusive	+ improvements	fully	good

REVIEW OF OPPOSITION

ANSWERS TO JURY

NOTES:

**SCORESHEET**

stage: 2 reporter: MWGQ  
 fight (round no.): 2 opponent: Russia  
 room: B reviewer: Belans  
 problem no.: 8  
 Juror's name: Weidhising signature: HW

**REPORT**

phenomenon	theory/model	experiments	relevant	comparison between	own contribution	task fulfillment
0 - almost no explanation	0 - almost no theory/model	0 - almost no experiments	0 - almost no relevant	0 - almost no comparison between	0 - almost no own contribution	0 - almost no task fulfillment
1 - some	1 - some	1 - some	1 - some	1 - some	1 - some	1 - some
2 - fair	2 - fair	2 - fair	2 - fair	2 - fair	2 - fair	2 - fair
3 - good	3 - good	3 - good	3 - good	3 - good	3 - good	3 - good
4 - detailed	4 - quite detailed	4 - well performed, sufficient number	4 - sufficient number	4 - qualitatively analysed	4 - interesting	4 - average
5 - demonstrative	5 - detailed, complex, correct	5 - errors analysed	5 - explained, conclusive	5 - + theory limits	5 - some aspects	5 - above average
6 - deep and comprehensive	6 - completely testable	6 - + reproducible, convincing analysis	6 - well fitting, deviations analysed, conclusive	6 - considerable experimental or theoretical	6 - greater extent than expected	6 - shows physical insight

**DISCUSSION WITH OPONENT**

scientific contribution	relevant arguments/responses	efficiency
0 - almost no scientific contribution	0 - almost no relevant arguments/responses	0 - almost no efficiency
1 - only technical points cleared	1 - some	1 - avoided some questions
2 - some scientific points cleared	2 - many	2 - cooperated well
3 - interesting points discussed	3 - + data/theory	3 - answered directly
4 - brought in new physics	4 - proved deep understanding	4 - productive

**ANSWERS TO JURY, OPONENT and REVIEWER'S QUESTIONS**

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

**NOTES:**

setup 1 to 3 too quick did not get to see at all!  
 deny of air & inquiry of insight? (should be given)  
 - no prediction on what happens  
 - effect starting at 5 min  
 - the use of the

**OPONENT**

start from 1 and add/subtract:  $1 + 0.5 + 1.2 + 0.5 = 4$

**QUESTIONS ASKED**

0 - almost no, irrelevant	0 - almost no, irrelevant	0 - almost no, irrelevant	0 - almost no, irrelevant	0 - almost no, irrelevant	0 - almost no, irrelevant	0 - almost no, irrelevant
1 - some unclear points	1 - some unclear points	1 - some unclear points	1 - some unclear points	1 - some unclear points	1 - some unclear points	1 - some unclear points
2 - short allowing short answers, prioritized, all time used	2 - very little	2 - some main points	2 - main points	2 - to important topics	2 - partial	2 - average
3 - almost all	3 - almost all	3 - all relevant points	3 - practically all points	3 - to most topics	3 - good	3 - many
4 - all & efficiently	4 - all & efficiently	4 - practically all points	4 - practically all points	4 - + improvement suggestions	4 - new crucial points	4 - almost all + improvement suggestions

**DISCUSSION WITH REPORTER**

scientific relevance	own opinions	efficiency
0 - almost no scientific relevance	0 - almost no own opinions	0 - almost no efficiency
1 - little	1 - very little	1 - almost no
2 - some	2 - some	2 - to some extent
3 - average	3 - some correct	3 - leading or cooperative
4 - good	4 - many correct	4 - quite efficient
5 - many	5 - many	5 - very efficient
6 - almost all + improvement suggestions	6 - almost all + improvement suggestions	6 - very efficient

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

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

**NOTES:**

Askd about the use of color letters in setup the colour of the light source (polydramatic)  
 Best numbers after the starting of a sketch - the calculations of the sketch  
 valid points of the sketch  
 didn't really engage in discussion

**REVIEWER**

start from 1 and add/subtract:  $1 + 1.8 + 2 + 0.2 = 5$

**QUESTIONS ASKED**

0 - too few, mostly irrelevant	0 - too few, mostly irrelevant	0 - too few, mostly irrelevant	0 - too few, mostly irrelevant	0 - too few, mostly irrelevant	0 - too few, mostly irrelevant	0 - too few, mostly irrelevant
1 - clear things out	1 - clear things out	1 - clear things out	1 - clear things out	1 - clear things out	1 - clear things out	1 - clear things out
2 - resolved, aimed at both rep. and opp.	2 - resolved, aimed at both rep. and opp.	2 - resolved, aimed at both rep. and opp.	2 - resolved, aimed at both rep. and opp.	2 - resolved, aimed at both rep. and opp.	2 - resolved, aimed at both rep. and opp.	2 - resolved, aimed at both rep. and opp.
3 - +short, apt and clear, well prioritized	3 - +short, apt and clear, well prioritized	3 - +short, apt and clear, well prioritized	3 - +short, apt and clear, well prioritized	3 - +short, apt and clear, well prioritized	3 - +short, apt and clear, well prioritized	3 - +short, apt and clear, well prioritized
4 - time managed efficiently	4 - time managed efficiently	4 - time managed efficiently	4 - time managed efficiently	4 - time managed efficiently	4 - time managed efficiently	4 - time managed efficiently

**REVIEW OF REPORT**

report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0 - poor	0 - almost no	0 - too few	0 - irrelevant	0 - no
1 - partial	1 - too short/long	1 - some	1 - partially relevant	1 - almost no
2 - good	2 - relevant parts	2 - many	2 - mostly adequate	2 - some
3 - detailed, complex	3 - accurate, + improvement suggestions	3 - fully	3 - adequate	3 - good

**REVIEW OF OPPOSITION**

speech summary	discussion analysis	own opinions	pros & cons	prioritisation
0 - poor	0 - almost no	0 - too few	0 - irrelevant	0 - no
1 - too short/long	1 - too short/long	1 - some	1 - partially relevant	1 - almost no
2 - informative, apt	2 - relevant parts	2 - many	2 - mostly adequate	2 - some
3 - brief but accurate	3 - accurate, + improvement suggestions	3 - fully	3 - adequate	3 - good

**ANSWERS TO JURY**

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

**NOTES:**

What is the resolution depth?  
 How does Salthorn work?

## SCORESHEET

reporter: (Name)	opponent: (Name)	room: E	problem no.: 8	juror's name: KATEJ BASHIN	signature: Andy Kelly
stage: 111	fight (round no.): 2nd				

15 minutes

REPORTER

Start from 1 and add/subtract

$1 + 0.5 = 0 - 2 = 1$

QUESTIONS ASKED	0	1	2	3	4	5	6
phenomenon	almost no	some	fair	good	detailed	demonstrative	deep and comprehensive
theory/model	almost no	some	fair	good	quite detailed,	correct	completely testable
experiments	too few	some	fair	well performed,	sufficient number	+ results explained	errors analysed
theory and experiment	no/almost no	some	not well fitting	deviations	qualitatively analysed	+ theory limits	considerable experimental
comparison between	misunderstood	others' data incorrectly cited	review of sources, cited	some own input	interesting	average	some aspects
own contribution	task fulfilment	others' data incorrectly cited	review of sources, cited	interesting	average	above average	greater extent
						and theoretical	than expected

**REPORT**

**NOTES:**

- Shows physical insight
- Shows physical insight
- Shows physical insight

**DISCUSSION WITH OPONENT**

**ANSWERS TO JURY, OPONENT and REVIEWER'S QUESTIONS**

QUESTIONS ASKED	0	1	2	3	4	5	6
phenomenon	almost no	some	fair	good	detailed	demonstrative	deep and comprehensive
theory/model	almost no	some	fair	good	quite detailed,	correct	completely testable
experiments	too few	some	fair	well performed,	sufficient number	+ results explained	errors analysed
theory and experiment	no/almost no	some	not well fitting	deviations	qualitatively analysed	+ theory limits	considerable experimental
comparison between	misunderstood	others' data incorrectly cited	review of sources, cited	some own input	interesting	average	some aspects
own contribution	task fulfilment	others' data incorrectly cited	review of sources, cited	interesting	average	above average	greater extent
						and theoretical	than expected

**DISCUSSION WITH OPONENT**

**ANSWERS TO JURY, OPONENT and REVIEWER'S QUESTIONS**

QUESTIONS ASKED	0	1	2	3	4	5	6
phenomenon	almost no	some	fair	good	detailed	demonstrative	deep and comprehensive
theory/model	almost no	some	fair	good	quite detailed,	correct	completely testable
experiments	too few	some	fair	well performed,	sufficient number	+ results explained	errors analysed
theory and experiment	no/almost no	some	not well fitting	deviations	qualitatively analysed	+ theory limits	considerable experimental
comparison between	misunderstood	others' data incorrectly cited	review of sources, cited	some own input	interesting	average	some aspects
own contribution	task fulfilment	others' data incorrectly cited	review of sources, cited	interesting	average	above average	greater extent
						and theoretical	than expected

OPONENT

Start from 1 and add/subtract

$1 + 1 = 1 + 0.5 = 0.5 = 5$

**DISCUSSION WITH REPORTER**

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

QUESTIONS ASKED	0	1	2	3	4	5	6
time used	almost no	very little	some main points	all relevant points	efficiently	practically all points	practically all points
understanding of	almost no	some	few	some	practically all	practically all	practically all
relevant topics	almost no	some	to important topics	to most topics	practically all	practically all	practically all
correct own	almost no	some	some	some	practically all	practically all	practically all
options expressed	almost no	some	some	some	practically all	practically all	practically all
priority	almost no	some	some	some	practically all	practically all	practically all
scientific	almost no	very little	some	some	practically all	practically all	practically all
relevance	almost no	very little	some	some	practically all	practically all	practically all
own opinions	almost no	very little	some	some	practically all	practically all	practically all
efficiency	almost no	very little	some	some	practically all	practically all	practically all
priority	almost no	very little	some	some	practically all	practically all	practically all
very good	almost no	very little	some	some	practically all	practically all	practically all

**REVIEWER**

Start from 1 and add/subtract

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

**NOTES:**

- Color given what for?
- Photo of set up?
- State of set up?
- Must state the number

**DISCUSSION WITH REPORTER**

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

QUESTIONS ASKED	0	1	2	3	4	5	6
time used	almost no	very little	some main points	all relevant points	efficiently	practically all points	practically all points
understanding of	almost no	some	few	some	practically all	practically all	practically all
relevant topics	almost no	some	to important topics	to most topics	practically all	practically all	practically all
correct own	almost no	some	some	some	practically all	practically all	practically all
options expressed	almost no	some	some	some	practically all	practically all	practically all
priority	almost no	some	some	some	practically all	practically all	practically all
scientific	almost no	very little	some	some	practically all	practically all	practically all
relevance	almost no	very little	some	some	practically all	practically all	practically all
own opinions	almost no	very little	some	some	practically all	practically all	practically all
efficiency	almost no	very little	some	some	practically all	practically all	practically all
priority	almost no	very little	some	some	practically all	practically all	practically all
very good	almost no	very little	some	some	practically all	practically all	practically all

**REVIEW OF REPORT**

**ANSWERS TO JURY**

QUESTIONS ASKED	0	1	2	3
too few, mostly irrelevant	0	1	2	3
some relevant, sufficient number, could	0	1	2	3
clear things out	0	1	2	3
most time used, many unclear points	0	1	2	3
resolved, aimed at both rep. and opp.	0	1	2	3
+short, apt and clear, well prioritized	0	1	2	3
time managed efficiently	0	1	2	3

**REVIEW OF OPPOSITION**

**ANSWERS TO JURY**

QUESTIONS ASKED	0	1	2	3
too few, mostly irrelevant	0	1	2	3
some relevant, sufficient number, could	0	1	2	3
clear things out	0	1	2	3
most time used, many unclear points	0	1	2	3
resolved, aimed at both rep. and opp.	0	1	2	3
+short, apt and clear, well prioritized	0	1	2	3
time managed efficiently	0	1	2	3

**NOTES:**

- Chatter - head
- ERROR 92% - concentration
- ERROR - accuracy by 20%

**QUESTIONS ASKED**

1 + 2 = 2 + 0 = 2 = 7

**DISCUSSION WITH REPORTER**

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

QUESTIONS ASKED	0	1	2	3	4	5	6
time used	almost no	very little	some main points	all relevant points	efficiently	practically all points	practically all points
understanding of	almost no	some	few	some	practically all	practically all	practically all
relevant topics	almost no	some	to important topics	to most topics	practically all	practically all	practically all
correct own	almost no	some	some	some	practically all	practically all	practically all
options expressed	almost no	some	some	some	practically all	practically all	practically all
priority	almost no	some	some	some	practically all	practically all	practically all
scientific	almost no	very little	some	some	practically all	practically all	practically all
relevance	almost no	very little	some	some	practically all	practically all	practically all
own opinions	almost no	very little	some	some	practically all	practically all	practically all
efficiency	almost no	very little	some	some	practically all	practically all	practically all
priority	almost no	very little	some	some	practically all	practically all	practically all
very good	almost no	very little	some	some	practically all	practically all	practically all

**REVIEWER**

Start from 1 and add/subtract

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

**NOTES:**

- Color given what for?
- Photo of set up?
- State of set up?
- Must state the number

**DISCUSSION WITH REPORTER**

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

QUESTIONS ASKED	0	1	2	3	4	5	6
time used	almost no	very little	some main points	all relevant points	efficiently	practically all points	practically all points
understanding of	almost no	some	few	some	practically all	practically all	practically all
relevant topics	almost no	some	to important topics	to most topics	practically all	practically all	practically all
correct own	almost no	some	some	some	practically all	practically all	practically all
options expressed	almost no	some	some	some	practically all	practically all	practically all
priority	almost no	some	some	some	practically all	practically all	practically all
scientific	almost no	very little	some	some	practically all	practically all	practically all
relevance	almost no	very little	some	some	practically all	practically all	practically all
own opinions	almost no	very little	some	some	practically all	practically all	practically all
efficiency	almost no	very little	some	some	practically all	practically all	practically all
priority	almost no	very little	some	some	practically all	practically all	practically all
very good	almost no	very little	some	some	practically all	practically all	practically all

**SCORESHEET**

Juror's name: McCuak  
signature:

problem no.: Balans  
room: Balans

stage: reporter: Macao  
opponent: Russia  
fight (round no.): 1  
reviewer: Balans

REPORTER  
Start from 1 and add/subtract  
 $1 + [5.2] + [1] - [1.5] = 2.7$   
**(3)**

REPORT

NOTES: to quick through setup / just clearly lines / no photo setup / what are the dots.

phenomenon	theory/model	experiments	relevant	comparison between	own contribution	task fulfillment
0 — almost no explanation	0 — almost no theory/model	0 — too few experiments	0 — almost no relevant	0 — almost no comparison between	0 — almost no own contribution	0 — almost no task fulfillment
1 — some	1 — fair	1 — well performed, sufficient number	1 — fair	1 — not well fitting	1 — some own input	1 — average
2 — some	2 — some	2 — good	2 — good	2 — deviations	2 — some scientific points cleared	2 — interesting solution
3 — good	3 — good	3 — quite detailed, + results explained	3 — quite detailed, + results explained	3 — + theory limits	3 — interesting points cleared	3 — some aspects
4 — detailed	4 — detailed, comprehensive, + reproducible, convincing analysis	4 — demonstrated	4 — deep and comprehensive, shows physical insight	4 — well fitting, deviations analysed, conclusive	4 — brought in new physics	4 — greater extent than expected

DISCUSSION WITH OPPONENT

relevant arguments/responses	scientific contribution	physics	understanding	efficiency
0 — too few	0 — almost no	0 — almost no	0 — almost no	0 — almost no
1 — some	1 — only technical points cleared	1 — some cleared	1 — + data/theory	1 — avoided some questions
2 — many	2 — some scientific points cleared	2 — interesting points cleared	2 — + data/theory	2 — cooperated well
3 — convincingly supported	3 — discussed	3 — interesting points	3 — + data/theory	3 — answered directly
4 — proved deep	4 — brought in new physics	4 — brought in new physics	4 — proved deep	4 — to most questions

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

0 — concise and correct or no questions asked

1 — some incorrect, inconclusive or too long

2 — deeply incorrect or show deep misconceptions

DISCUSSION WITH REPORTER

scientific contribution of topics presented	relevance	own opinions	efficiency	priority
0 — almost no	0 — almost no	0 — almost no	0 — almost no	0 — almost no
1 — irrelevant	1 — some	1 — some correct	1 — to some extent	1 — almost no
2 — little	2 — average	2 — some correct	2 — leading or cooperative	2 — some
3 — many crucial points	3 — good	3 — many correct	3 — quite efficient	3 — reasonable
4 — very good	4 — reasonable	4 — + improvement	4 — very efficient	4 — very good

OPPOSITION (SPEECH)

relevant topics addressed	correct own	practically all points	efficiently
0 — almost no	0 — almost no	0 — almost no	0 — almost no
1 — some	1 — some	1 — some main points	1 — very little
2 — some	2 — to important topics	2 — main points	2 — not all
3 — to most topics	3 — + improvement	3 — all relevant points	3 — almost all
4 — practically all	4 — suggestions	4 — practically all points	4 — efficiently

ANSWERS TO JURY and REVIEWER'S QUESTIONS

0 — concise and correct or no questions asked

1 — some incorrect, inconclusive or too long

2 — deeply incorrect or show deep misconceptions

OPPONENT  
Start from 1 and add/subtract  
 $1 + [1.5] + [0.5] - [0.5] = 1.5$   
**(7)**

REVIEWER

Start from 1 and add/subtract  
 $1 + [3] + [2] - [0.1] = 5.9$   
**(8)**

NOTES: you tried so hard... result was 2 shows so poor, hard to make progress... *you tried so hard... result was 2 shows so poor, hard to make progress...*

QUESTIONS ASKED

time used	understanding of relevant topics	correct own	priority
0 — almost no	0 — almost no	0 — almost no	0 — almost no
1 — very little	1 — some main points	1 — little	1 — to some extent
2 — not all	2 — main points	2 — average	2 — leading or cooperative
3 — almost all	3 — all relevant points	3 — good	3 — quite efficient
4 — efficiently	4 — practically all points	4 — very good	4 — very efficient

ANSWERS ASKED

report summary & understanding analysis	discussion	own opinions	pros & cons	priority
0 — poor	0 — almost no	0 — too few	0 — irrelevant	0 — no
1 — partial	1 — too short/long	1 — poor	1 — irrelevant	1 — no
2 — good	2 — relevant parts	2 — informative, apt	2 — mostly adequate	2 — partially relevant
3 — detailed, accurate, complex	3 — + improvement	3 — accurate, conclusive	3 — + improvement	3 — fully

QUESTIONS ASKED

time managed efficiently	+short, apt and clear, well prioritized	time managed efficiently
0 — too few, mostly irrelevant	0 — too few, mostly irrelevant	0 — too few, mostly irrelevant
1 — clear things out	1 — clear things out	1 — clear things out
2 — most time used, many unclear points	2 — most time used, many unclear points	2 — most time used, many unclear points
3 — +short, apt and clear, well prioritized	3 — +short, apt and clear, well prioritized	3 — +short, apt and clear, well prioritized

ANSWERS TO JURY

0 — concise and correct or no questions asked

1 — some incorrect, inconclusive or too long

2 — deeply incorrect or show deep misconceptions

REVIEWER

Start from 1 and add/subtract  
 $1 + [3] + [2] - [0.1] = 5.9$   
**(8)**

NOTES: is correct to + by camera only *is correct to + by camera only*

QUESTIONS ASKED

report summary & understanding analysis	discussion	own opinions	pros & cons	priority
0 — poor	0 — almost no	0 — too few	0 — irrelevant	0 — no
1 — partial	1 — too short/long	1 — poor	1 — irrelevant	1 — no
2 — good	2 — relevant parts	2 — informative, apt	2 — mostly adequate	2 — partially relevant
3 — detailed, accurate, complex	3 — + improvement	3 — accurate, conclusive	3 — + improvement	3 — fully

ANSWERS TO JURY

0 — concise and correct or no questions asked

1 — some incorrect, inconclusive or too long

2 — deeply incorrect or show deep misconceptions

## SCORESHEET

stage: 3      reporter: Maccao      opponent: Russia      room: E      problem no.: 2  
 fight (round no.): 2      reviewer: Belaruss      signature: *AK*  
 Juror's name: *AKENSB*

REPORT		DISCUSSION WITH OPPONENT				ANSWERS TO JURY			
phenomenon	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	scientific contribution	relevant arguments/responses	efficiency	
0	almost no explanation	almost no theory/model	no/almost no relevant experiments	others' data, incorrectly cited	misunderstood	almost no scientific contribution	too few relevant arguments/responses	almost no, chaotic	0
1	some explanation	some fair theory/model	some not well fitting relevant experiments	review of sources, cited	partly average	only technical points cleared	some avoided some questions	avoided some	1
2	fair explanation	fair theory/model	some fair relevant experiments	some own input	average	some scientific points cleared	many questions	cooperated well	2
3	good explanation	good theory/model	well performed, sufficient number of relevant experiments	some interesting results	interesting solution	interesting points cleared	cooperated well	cooperated well	3
4	detailed explanation	quite detailed, correct theory/model	+ results explained, errors analysed	qualitatively analysed	some aspects	interesting points discussed	answered directly	answered directly	4
5	detailed and comprehensive	detailed, complex, shows physical insight	explained, deviations well fitting, deviations + reproducible, convincing analysis	considerable experimental or theoretical	greater extent than expected	convincingly supported	to most questions	efficient, productive	5
6	deep and comprehensive	deep and comprehensive, shows physical insight	convincing analysis, errors analysed, explained, deviations well fitting, deviations + reproducible, convincing analysis	considerable experimental and theoretical	convincingly supported	convincingly supported	to most questions	efficient, productive	6

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

QUESTIONS ASKED		DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS			
time used	understanding of relevant topics	correct own prioritisation	relevant topics addressed	opinions expressed	scientific relevance	own opinions presented	efficiency	prioritisation	
0	almost no time used	almost no correct own prioritisation	almost no relevant topics addressed	almost no opinions expressed	almost no scientific contribution of topics presented	almost no own opinions presented	almost no efficiency	almost no prioritisation	0
1	very little time used	some main points	few relevant topics	some addressed	little some contribution of topics presented	some own opinions presented	to some extent	almost no	1
2	not all time used	main points	some important topics	some addressed	partial average contribution of topics presented	some own opinions presented	to some extent	almost no	2
3	almost all time used	all relevant points	to most topics	many addressed	good many correct contribution of topics presented	many own opinions presented	quite efficient	reasonable	3
4	efficiently all & time used	practically all points	practically all relevant topics	practically all addressed	new crucial points	almost all own opinions presented	very efficient	very good	4

OPPONENT      1 + 1.5 + 2.5 = 5  
 Start from 1 and add/subtract

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

REVIEWER      1 + 2.5 + 1.5 + 1.5 = 6  
 Start from 1 and add/subtract

NOTES:

NOTES:

NOTES:



Juror	Team	Stage 1			Stage 2			Stage 3			Stage 4		
		Russia	Belarus	Macao	Belarus	Macao	Russia	Macao	Russia	Belarus	Rep	Opp	Rev
Alan Allinson		6	6	6	5	6	6	3	5	6			
Aleksandra Alonic		6	6	5	7	5	7	3	6	7			
Matej Badin		6	6	3	5	5	5	1	5	7			
William McWaters		5	7	4	8	7	7	3	7	8			
Wei Hsiung Wee		6	5	3	7	3	3	2	4	7			
	Acting Team Member												
		Wikita Kozlov	<del>Timofey</del> Leak Gleb Remyazov	Ka Meng Cheng	Irina Dotsenko	Cheng Hong	Polina Turish chava	Ka Weng Cheng	Alexey <del>Alexey</del> Bardakov Irina Pavlovich	Gleb Poryazov <del>Timofey</del> Leak Michael skvartovich			
	Rejected Problems							Q15					
	Accepted Problem	Q9			Q1			Q8					

Signature Fight Assistant: Wan Kwai Double-checked with Scoring Guidelines by second Fight Assistant (signature): [Signature]