Cooring Cuidali	Fight (Round no.): Roon	m: K Stage: 3 Problem no.: 3
Scoring Guideling	nes Juror: <u>IVAN ANTSIPA</u>	U Signature:
application of appropriate mathematics • r	ots, theories and principles of the problem • an easonable experimental technique to gather and experimental findings to draw suitable conclusions.	record data for demonstrate the phenomena if
An opposition should show that: • the opponent challenged the reporter's un	nderstanding of the presented concepts, theories pponent critiqued the experimental technique use	and <i>principles</i> • the opponent understood the ed and questioned the <i>validity</i> of the <i>data</i> • the
important aspects (especially the controvers	ctive summary of the performances the reporter sial ones) • the reviewer's personal opinion was intrivial and demonstrated, where possible, the red by the reporter and the opponent	n evidence (not just superficial observations)
 The reporter, opponent and reviewer Consider the following suggestions to Select each partial grade from each set 	consists of a partial grade for <i>physics</i> , <i>presen</i> each <i>start with 5 points</i> . add to or deduct from the initial <i>5 points</i> . ction and write it in the corresponding box. to questions were posed or not finding shortc	
Rep.: AdSTRALTA 5	Opp.: <u>FRANCE</u> 5	Rev.: RUSSIA 5
Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions	Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions	Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions
Accurate answers Presentation ±1 Clear and understandable	 ☐ Accurate answers Presentation ±1 ☐ Clear and understandable 	☐ Accurate answers Presentation ±1 ☐ Clear and understandable
Appropriate manner Overall impression	☐ Appropriate manner ☐ Overall impression	☐ Appropriate manner ☐ Overall impression
Quality of experimental technique(s)	Opponent ±1	Reviewer ±1 Provides a thorough review of report and discussion
Structure Explanation of formulae and symbols	☐ Shows the strong and weak points of the report ☐ Finds shortcomings or errors in	Expresses own opinion about topics presented or discussed
Appropriate models, conformity of dimensions	the report ☐ Relevance of the questions	Relevance of questions to both the reporter and the opponent Draws attention to points missed by the reporter or the appearant.
 Slides, on-site experiments, audio, video, as appropriate References, proper citations of ideas and input of others 	☐ Contribution to the discussion	by the reporter or the opponent This sheet will be collected by the
Novelty of the report		This sheet will be fight assistant, so we can scan it and archive your partial grades – please

Final Grade: Reporter

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	Fight (Round no.): 👤 📗 Roc	m: K Stage: 3 Problem no.:
Scoring Guideli	NES Juror: FRANCISCO SWAM (NATHAN)	
A report should include:		
application of appropriate mathematics	pts, theories and principles of the problem • an reasonable experimental technique to gather and experimental findings to draw suitable conclusindable manner	record data for demonstrate the phenomena if
An opposition should show that • the opponent challenged the reporter's appropriate mathematics presented • the opponent appreciated and highlighted the statements.	understanding of the presented concepts, theories opponent critiqued the experimental technique us	s and <i>principles</i> • the opponent understood the ed and questioned the <i>validity</i> of the <i>data</i> • the
A review should show that:	***************************************	
important aspects (especially the controve	ective summary of the performances the reporter rsial ones) • the reviewer's personal opinion was non-trivial and demonstrated, where possible, the ed by the reporter and the opponent	in evidence (not just superficial observations)
 The reporter, opponent and reviewer Consider the following suggestions to Select each partial grade from each see 	s consists of a partial grade for <i>physics, preser</i> reach start with 5 points. To add to or deduct from the initial 5 points. The ection and write it in the corresponding box. The no questions were posed or not finding shorte	
Rep.: Australia 5 ALLISS 4 LI 5	Opp.: France VILLIAM BUMD 5	Rev.: Rusia 5
Physics ±3	Physics ±3	Physics ±3
Correct and relevant physics	Correct and relevant physics	☐ Correct and relevant physics
Scientific approach	Scientific approach	☐ Scientific approach
Validity of conclusions	☐ Validity of conclusions	Validity of conclusions
Accurate answers	☐ Accurate answers	☐ Accurate answers
Presentation ±1	Presentation ±1	Presentation ±1
Clear and understandable	Clear and understandable	☐ Clear and understandable
☐ Appropriate manner	Appropriate manner	Appropriate manner
Overall impression	☐ Overall impression	Overall impression
Reporter ±1	Opponent ±1 \odot	Reviewer ±1
Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion
☐ Structure	Shows the strong and weak points of the report	Expresses own opinion about topics presented or discussed
Explanation of formulae and symbols	Finds shortcomings or errors in the report	Relevance of questions to both the
Appropriate models, conformity of dimensions	Relevance of the questions	reporter and the opponent Draws attention to points missed
Slides, on-site experiments, audio.	I .	Draws attention to points missed by the reporter or the opponent

This sheet will be collected by the fight assistant, so we can scan it and archive your partial grades - please

do not bend

Final Grade: Opponent

Contribution to the discussion

Slides, on-site experiments, audio, video, as appropriate

References, proper citations of ideas and input of others

☐ Contribution to the discussion

Novelty of the report

Final Grade: Reporter

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Scoring	Guidelines	
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	# 6	Fight (Round no.):	Roon	n: K Stage: 3 Proble	m no.: <u>5</u>		
Scoring Guide	ines	Juror: Ninut Po	1.S.Sondie	_ Signature: _ Wf			
A report should include: • a presentation of the appropriate application of appropriate mathematical appropriate) • linking of theoretical complex ideas in an effective and und	<i>cs</i> • reasonable e and <i>experimento</i>	xperimental technique Il findings to draw sui	to <i>gather</i> and .	record data (or demonstrate the phe	nomena if		
An opposition should show the opponent challenged the report appropriate mathematics presented opponent appreciated and highlighted	hat: er's understandin the opponent cri	g of the presented con	I l technique use	and <i>principles</i> • the opponent under d and questioned the <i>validity</i> of the	rstood the data • the		
A review should show that: • the reviewer succeeded in giving an important aspects (especially the consuch personal opinions were informat principles and appropriate mathematics)	<i>roversial</i> ones) ● ⁄ <i>e, non-trivial</i> an	the reviewer's <i>persona</i> d demonstrated, where	<i>l opinion</i> was in possible, the re	n evidence (not just superficial obser	vations) e		
 The grade for each of the three t The reporter, opponent and revi Consider the following suggestion Select each partial grade from each pon't punish missing 'answers' w 	wer each start as to add to or a ch section and a	with 5 points. deduct from the initia vrite it in the corresp	l <i>5 points</i> . onding box.	tation and for their specific role. Domings if there were none to find.			
Rep.: Australia 5	Орр.	: France	5	Rev.: Russia	5		
Physics ±3	Physi	cs ±3	100	Physics ±3	1		
☐ Correct and relevant physics☐ Scientific approach☐ Validity of conclusions☐ Accurate answers	☐ Scie	rect and relevant pentific approach idity of conclusions turate answers		 □ Correct and relevant physics □ Scientific approach □ Validity of conclusions □ Accurate answers 			
Presentation ±1		ntation ±1	0	Presentation ±1	0		
☐ Clear and understandable☐ Appropriate manner☐ Overall impression	☐ Apr	ar and understanda propriate manner erall impression	ble	☐ Clear and understandabl☐ Appropriate manner☐ Overall impression	le		
Reporter ±1	Орро	nent ±1	1	Reviewer ±1	/		
Quality of experimental technique(s)	☐ Res solu	ponse to the report	ter's	Provides a thorough revier report and discussion	ew of		
Structure	☐ Sho of th	ws the strong and where	veak points	Expresses own opinion al	bout		
Explanation of formulae and symbols	☐ Find	ls shortcomings or or report	errors in	topics presented or discussed Relevance of questions to both the			
Appropriate models, conformi of dimensions	v I	vance of the quest	ions	reporter and the opponent Draws attention to points missed			
Slides, on-site experiments, au video, as appropriate	dio, 🗆 Con	tribution to the disc	cussion	by the reporter or the op	ponent		
References, proper citations or ideas and input of others				This sheet will be collected	by the		
Novelty of the report				fight assistant, so we can see archive your partial grades	W 7 5 1 1 1		
Contribution to the discussion		_		do not bend			

Final Grade: Opponent

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				STATE OF THE PARTY										

Fight (Round no.): _	Room: _	K Stage	e: <u>3</u>	Problem no.:	5
Juror: Tomás	BZDUŠEK	Signature: "	The	320	

A	repo	rt sh	ould i	incl	ude:
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• a presentation of the appropriate concepts, theories and principles of the problem • an explanation of the observed phenomena • an application of appropriate mathematics • reasonable experimental technique to gather and record data (or demonstrate the phenomena if appropriate) • linking of theoretical and experimental findings to draw suitable conclusions • an attempt to communicate difficult or complex ideas in an effective and understandable manner

An opposition should show that:

• the opponent challenged the reporter's understanding of the presented concepts, theories and principles • the opponent understood the appropriate mathematics presented ● the opponent critiqued the experimental technique used and questioned the validity of the data ● the opponent appreciated and highlighted the strengths and weaknesses of the report

A review should show that:

Final Grade: Reporter

- the reviewer succeeded in giving an objective summary of the performances the reporter and opponent the reviewer appreciated the important aspects (especially the controversial ones) • the reviewer's personal opinion was in evidence (not just superficial observations) • such personal opinions were informative, non-trivial and demonstrated, where possible, the reviewer's understanding of concepts, theories, principles and appropriate mathematics used by the reporter and the opponent
- The grade for each of the three teams consists of a partial grade for physics, presentation and for their specific role.
- The reporter, opponent and reviewer each start with 5 points.

 Select each partial grade from each see 	add to or deduct from the initial 5 points . ction and write it in the corresponding box. no questions were posed or not finding shortc	omings if there were none to find.
Rep.: Australia 5	Opp.: France 5	Rev.: Pussia 5
Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions Accurate answers Presentation ±1 Clear and understandable Appropriate manner Overall impression Reporter ±1 Quality of experimental technique(s) Structure Explanation of formulae and symbols Appropriate models, conformity of dimensions Slides, on-site experiments, audio,	Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions Accurate answers Presentation ±1 Clear and understandable Appropriate manner Overall impression Opponent ±1 Response to the reporter's solution Shows the strong and weak points of the report Finds shortcomings or errors in the report Relevance of the questions Contribution to the discussion	Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions Accurate answers Presentation ±1 Clear and understandable Appropriate manner Overall impression Reviewer ±1 Provides a thorough review of report and discussion Expresses own opinion about topics presented or discussed Relevance of questions to both the reporter and the opponent Draws attention to points missed by the reporter or the opponent
video, as appropriate References, proper citations of ideas and input of others Novelty of the report Contribution to the discussion	Contribution to the discussion	This sheet will be collected by the fight assistant, so we can scan it and archive your partial grades – please do not bend
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Final Grade: Opponent

Scoring Guideli	Fight (Round no.): Roce Nes Juror: G. JENNIMGS	om: K Stage: 3 Problem no.: Signature: Signature:
application of appropriate mathematics •	reasonable experimental technique to gather and experimental findings to draw suitable conclus	explanation of the observed phenomena • and record data (or demonstrate the phenomena if ions • an attempt to communicate difficult or
An opposition should show that • the opponent challenged the reporter's u	: understanding of the presented concepts, theories opponent critiqued the experimental technique us	s and <i>principles</i> • the opponent understood the sed and questioned the <i>validity</i> of the <i>data</i> • the
A review should show that: • the reviewer succeeded in giving an obje important aspects (especially the controver	ective summary of the performances the reporter rsial ones) • the reviewer's personal opinion was on-trivial and demonstrated, where possible, the	in evidence (not just superficial abandations)
 The reporter, opponent and reviewer Consider the following suggestions to Select each partial grade from each se 	s consists of a partial grade for <i>physics</i> , <i>present</i> each <i>start with 5 points</i> . I add to or <i>deduct</i> from the initial <i>5 points</i> . I action and <i>write it</i> in the corresponding box. The property of the present of the property of the present o	
Rep.: Hustralia 5	Opp.: France 5	Rev.: Russia 5
Physics ±3 Correct and relevant physics Scientific approach OValidity of conclusions Accurate answers	Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions Accurate answers	Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions Accurate answers
Presentation ±1 Clear and understandable Appropriate manner Overall impression	Presentation ±1 Clear and understandable Appropriate manner Overall impression	Presentation ±1 Clear and understandable Appropriate manner Overall impression
Reporter ±1 Quality of experimental technique(s) Structure	Opponent ±1 Response to the reporter's solution	Reviewer ±1 Provides a thorough review of report and discussion
Explanation of formulae and symbols	Shows the strong and weak points of the report Finds shortcomings or errors in the report	Expresses own opinion about topics presented or discussed Relevance of questions to both the reporter and the opponent
Appropriate models, conformity of dimensions Slides, on-site experiments, audio, video, as appropriate	Relevance of the questions Contribution to the discussion	Draws attention to points missed by the reporter or the opponent
References, proper citations of ideas and input of others		This sheet will be collected by the fight assistant, so we can scan it and
☐ Novelty of the report☐ Contribution to the discussion		fight assistant, so we con- archive your partial grades - please do not bend

Final Grade: Opponent Final Grade: Reviewer Revised after IOC feedback and approved by EC on 2011-11-03

Final Grade: Reporter

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Fight (Round no.): _	1	_ Room: _	<u>K</u>	Stage:	3	Problem no.:	5
Juror: STANISCA	UPA	WOS	Signatur	۵۰	Pan.	- 6	

Д	re	por	t	sho	uld	in	clu	de	

• a presentation of the appropriate concepts, theories and principles of the problem • an explanation of the observed phenomena • an application of appropriate mathematics • reasonable experimental technique to gather and record data (or demonstrate the phenomena if appropriate) • linking of theoretical and experimental findings to draw suitable conclusions • an attempt to communicate difficult or complex ideas in an effective and understandable manner

An opposition should show that:

• the opponent challenged the reporter's understanding of the presented concepts, theories and principles • the opponent understood the appropriate mathematics presented • the opponent critiqued the experimental technique used and questioned the validity of the data • the opponent appreciated and highlighted the strengths and weaknesses of the report

A review should show that:

- the reviewer succeeded in giving an objective summary of the performances the reporter and opponent the reviewer appreciated the important aspects (especially the controversial ones) • the reviewer's personal opinion was in evidence (not just superficial observations) • such personal opinions were informative, non-trivial and demonstrated, where possible, the reviewer's understanding of concepts, theories, principles and appropriate mathematics used by the reporter and the opponent
- The grade for each of the three teams consists of a partial grade for *physics*, *presentation* and for their *specific role*.
- The reporter, opponent and reviewer each start with 5 points.
- Consider the following *suggestions* to *add* to or *deduct* from the initial *5 points*.
- Select each partial grade from each section and write it in the corresponding box

 Don't punish missing 'answers' when n 	o questions were posed or not finding shortc	omings if there were none to find.
Rep.: Ausdralia 5	Opp.: France 5	Rev.: 24881A 5
Physics ±3 ☐ Correct and relevant physics ☐ Scientific approach ☐ Validity of conclusions ☐ Accurate answers	Physics ±3 ☐ Correct and relevant physics ☐ Scientific approach ☐ Validity of conclusions ☐ Accurate answers	Physics ±3 ☐ Correct and relevant physics ☐ Scientific approach ☐ Validity of conclusions ☐ Accurate answers
Presentation ±1 ☐ Clear and understandable ☐ Appropriate manner ☐ Overall impression	Presentation ±1 ← 0,5 □ Clear and understandable □ Appropriate manner □ Overall impression	Presentation ±1
Reporter ±1	Opponent ±1	Reviewer ±1
☐ Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion
☐ Structure ☐ Explanation of formulae and symbols	☐ Shows the strong and weak points of the report ☐ Finds shortcomings or errors in	Expresses own opinion about topics presented or discussedRelevance of questions to both the
Appropriate models, conformity of dimensions	Relevance of the questions	reporter and the opponent Draws attention to points missed by the reporter or the opponent
☐ Slides, on-site experiments, audio, video, as appropriate ☐ References, proper citations of ideas and input of others	☐ Contribution to the discussion	is be collected by the
Novelty of the report		This sheet will be come fight assistant, so we can scan it and archive your partial grades — please
☐ Contribution to the discussion		do not bend

Final Grade: Reporter



Final Grade: Opponent





	Fight (Round no.):	m:K Stage:L Problem/no.:
Scoring Guideli	nes Juror: <u>IVAN ANTSTRAU</u>	
A report should include:		
• a presentation of the appropriate conce application of appropriate mathematics •	pts, theories and principles of the problem • an reasonable experimental technique to gather and experimental findings to draw suitable conclusindable manner	record data (or demonstrate the phenomena if
An opposition should show that • the opponent challenged the reporter's appropriate mathematics presented • the opponent appreciated and highlighted the second	understanding of the presented concepts, theories opponent critiqued the experimental technique us	and <i>principles</i> • the opponent understood the ed and questioned the <i>validity</i> of the <i>data</i> • the
A review should show that:		
important aspects (especially the controve	ective summary of the performances the reporter rsial ones) • the reviewer's personal opinion was in the reorder and demonstrated, where possible, the red by the reporter and the opponent	n evidence (ant just conorficial abcomunicant) -
 The reporter, opponent and reviewer Consider the following suggestions to Select each partial grade from each se 	s consists of a partial grade for <i>physics, presen</i> reach start with 5 points. o add to or deduct from the initial 5 points. ection and write it in the corresponding box. no questions were posed or not finding shorto	
Rep.: RUSSIA 5	Opp.: AUSTRALĪA 5	Rev.: FRANCE 5
Physics ±3	Physics ±3	Physics ±3 -1
☐ Correct and relevant physics ☑ Scientific approach ﴿	Correct and relevant physics	☐ Correct and relevant physics
☐ Validity of conclusions	☐ Scientific approach ☐ Validity of conclusions	☐ Scientific approach ☐ Validity of conclusions
Accurate answers	☐ Accurate answers	☐ Accurate answers
Presentation ±1	Presentation ±1	Presentation ±1
Clear and understandable	☐ Clear and understandable	☐ Clear and understandable
☐ Appropriate manner☐ Overall impression	☐ Overall impression	Appropriate manner
	☐ Overall impression	Overall impression
Reporter ±1	Opponent ±1	Reviewer ±1
☐ Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion
Structure	Shows the strong and weak points of the report	Expresses own opinion about topics presented or discussed
☐ Explanation of formulae and symbols	Finds shortcomings or errors in the report	Relevance of questions to both th
Appropriate models, conformity of dimensions	Relevance of the questions	reporter and the opponent Draws attention to points missed.
Slides, on-site experiments, audio, video, as appropriate	Contribution to the discussion	Draws attention to points missed by the reporter or the opponent
References, proper citations of ideas and input of others		This sheet will be collected by the fight assistant, so we can scan it and
Novelty of the report		fight assistant, so we can be a piease archive your partial grades – piease
Contribution to the discussion		do not bend

Final Grade: Reporter

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Cooring Cuidali	Fight (R	Round no.):	Roon	n:k Stage: Pro	oblem no.:la
Scoring Guideli	nes Juror: _	PRANCISCO CHAMINATU	a.d	_ Signature:	<u> </u>
A report should include: • a presentation of the appropriate conce application of appropriate mathematics • appropriate) • linking of theoretical and complex ideas in an effective and understa	epts, theories and princ reasonable experiment experimental findings	riples of the probler	m • an e	explanation of the observed phe	nhenomena if
An opposition should show that • the opponent challenged the reporter's appropriate mathematics presented • the opponent appreciated and highlighted the	: :understanding of the proponent critiqued the	experimental techn	theories iique use	and <i>principles</i> • the opponent u d and questioned the <i>validity</i> of	nderstood the the <i>data</i> • the
A review should show that: • the reviewer succeeded in giving an objiimportant aspects (especially the controve such personal opinions were informative, in principles and appropriate mathematics us	<i>rsial</i> ones) • the review non-trivial and demonst	ver's personal opinic trated, where possib	on was in	evidence (not just superficial of	heoryatione) a
 The grade for each of the three team The reporter, opponent and reviewe. Consider the following suggestions to Select each partial grade from each s Don't punish missing 'answers' when 	r each <i>start with 5 po</i> o <i>add</i> to or <i>deduct</i> fro ection and <i>write it</i> in	oints. Om the initial 5 poi the corresponding	nts.		
Rep.: RUSSIA 5	Opp.: AVS	RALIA.	5	Rev.: FRANCE	5
Physics ±3	Physics ±3		4	Physics ±3	2
Correct and relevant physics Scientific approach Validity of conclusions Accurate answers	☐ Correct and☐ Scientific ap☐ Validity of c☐ Accurate an	onclusions		☐ Correct and relevant ☐ Scientific approach ☐ Validity of conclusion ☐ Accurate answers	. ,
Presentation ±1	Presentation	1 ±1		Presentation ±1	33300
Clear and understandableAppropriate mannerOverall impression	Clear and ur Appropriate Overall impr	manner		☐ Clear and understand ☐ Appropriate manner ☐ Overall impression	lable
Reporter ±1	Opponent ±1	L		Reviewer ±1	
Quality of experimental technique(s)	Response to solution	the reporter's		Provides a thorough report and discussion	eview of
Structure	Shows the st	trong and weak p	oints	Expresses own opinio topics presented or di	n about
Explanation of formulae and symbols	Finds shortco	omings or errors	in	Relevance of question reporter and the opport	is to both the
Appropriate models, conformity of dimensions		the questions		☐ Draws attention to po	ints missed
Slides, on-site experiments, audio, video, as appropriate	☐ Contribution	to the discussion	n	by the reporter or the	opponent
References, proper citations of ideas and input of others			demand proper security.	This sheet will be collecting fight assistant, so we can	3000
Novelty of the report of			ni mengadikan	archive your partial grad	jes – piease
Contribution to the discussion		grantistic initial de americano de la saciona de la secono		do not bend	
Final Grade: Reporter	Final Grade: Op	ponent 7	Revised a	Final Grade: Reviewer fter IOC feedback and approved by E	C on 2011-11-03

Scoring Guidelines	Fight (I	Round no.)	: 1 🌺	Room:		Stage:	Prob	olem no.: _ ¹୯	9
scoring Guidennes	Juror:	Nirat	Pussad	lle.	Signature	. Ni	j		

Α	rep	ort	shou	ıld	incl	ude:

• a presentation of the appropriate concepts, theories and principles of the problem • an explanation of the observed phenomena • an application of appropriate mathematics • reasonable experimental technique to gather and record data (or demonstrate the phenomena if appropriate) • linking of theoretical and experimental findings to draw suitable conclusions • an attempt to communicate difficult or complex ideas in an effective and understandable manner

An opposition should show that:

• the opponent challenged the reporter's understanding of the presented concepts, theories and principles • the opponent understood the appropriate mathematics presented • the opponent critiqued the experimental technique used and questioned the validity of the data • the opponent appreciated and highlighted the strengths and weaknesses of the report

A review should show that:

- the reviewer succeeded in giving an *objective summary* of the performances the *reporter* and *opponent* the reviewer appreciated the important aspects (especially the controversial ones) • the reviewer's personal opinion was in evidence (not just superficial observations) • such personal opinions were informative, non-trivial and demonstrated, where possible, the reviewer's understanding of concepts, theories, principles and appropriate mathematics used by the reporter and the opponent
- The grade for each of the three teams consists of a partial grade for physics, presentation and for their specific role.

 Select each partial grade from each se 	each start with 5 points. add to or deduct from the initial 5 points. ction and write it in the corresponding box. no questions were posed or not finding shorte	comings if there were none to find.
Rep.: Russia 5	Opp.: Australia 5	Rev.: France 5
Physics ±3	Physics ±3	Physics ±3
☐ Correct and relevant physics	☐ Correct and relevant physics	☐ Correct and relevant physics
☑ Scientific approach → ?	☐ Scientific approach	Scientific approach
☐ Validity of conclusions	☐ Validity of conclusions	☐ Validity of conclusions
☐ Accurate answers	☐ Accurate answers	☐ Accurate answers
Presentation ±1	Presentation ±1	Presentation ±1
☐ Clear and understandable	Clear and understandable	☐ Clear and understandable
☐ Appropriate manner	☐ Appropriate manner	☐ Appropriate manner
Overall impression	Overall impression	☐ Overall impression
Reporter ±1	Opponent ±1	Reviewer ±1
Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion
☐ Structure	Shows the strong and weak points	☐ Expresses own opinion about
Explanation of formulae and	of the report	topics presented or discussed
symbols Appropriate models, conformity	Finds shortcomings or errors in the report	Relevance of questions to both the reporter and the opponent
of dimensions	☐ Relevance of the questions	Draws attention to points missed
Slides, on-site experiments, audio, video, as appropriate	☐ Contribution to the discussion	by the reporter or the opponent
References, proper citations of ideas and input of others		This sheet will be collected by the fight assistant, so we can scan it and
☐ Novelty of the report		fight assistant, so we com- archive your partial grades — please
☐ Contribution to the discussion		do not bend
Final Grade: Reporter 7	Final Grade: Opponent Revised	Final Grade: Reviewer 6 after IOC feedback and approved by EC on 2011-11-03

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				State		-	-		-	_				_

☐ Correct and relevant physics

☐ Validity of conclusions

☐ Clear and understandable

☐ Quality of experimental

☐ Appropriate models, conformity

☐ Slides, on-site experiments, audio,

☐ Accurate answers

Presentation +1

Overall impression

Reporter ±1

☐ Structure

Physics ±3

Scoring Guidelii		n: K Stage: 2 Problem no.: 10
	Juror: 10mas 62003EK	Signature: Tw Bzb
application of appropriate mathematics • r	ets, theories and principles of the problem • an eleasonable experimental technique to gather and experimental findings to draw suitable conclusion dable manner	record data (or demonstrate the phenomena if
An opposition should show that: • the opponent challenged the reporter's un appropriate mathematics presented • the opponent appreciated and highlighted the st	nderstanding of the presented concepts, theories pponent critiqued the experimental technique use	and <i>principles</i> • the opponent understood the ed and questioned the <i>validity</i> of the <i>data</i> • the
important aspects (especially the controvers	ctive summary of the performances the reporter sial ones) • the reviewer's personal opinion was in the reviewer's personal opinion was in the reviewer's personal opinion was in the reporter and the opponent	evidence (not just superficial observations)
The <i>reporter, opponent</i> and <i>reviewer</i> Consider the following <i>suggestions</i> to Select each partial grade from each set	consists of a partial grade for <i>physics</i> , <i>present</i> each <i>start with 5 points</i> . add to or <i>deduct</i> from the initial <i>5 points</i> . action and <i>write it</i> in the corresponding box. so questions were posed or not finding shortcomes.	
Rep.: Russia 5	Opp.: Australia 5	Rev.: France 5
Physics ±3	Physics ±3	Physics ±3
Correct and relevant physics	☐ Correct and relevant physics	☐ Correct and relevant physics
Scientific approach	☐ Scientific approach	☐ Scientific approach
Validity of conclusions	☐ Validity of conclusions	☐ Validity of conclusions
Accurate answers	☐ Accurate answers	☐ Accurate answers
resentation ±1	Presentation ±1	Presentation ±1
Clear and understandable	☐ Clear and understandable	☐ Clear and understandable
J Appropriate manner	Appropriate manner	☐ Appropriate manner
Overall impression	Overall impression	Overall impression
eporter ±1 +5	Opponent ±1 -0.5	Reviewer ±1 + .5
Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion
J Structure	Shows the strong and weak points	Expresses own opinion about
Explanation of formulae and symbols	of the report Finds shortcomings or errors in	topics presented or discussed Relevance of questions to both the
Appropriate models, conformity of dimensions	the report Relevance of the questions	reporter and the opponent
Slides, on-site experiments, audio, video, as appropriate	☐ Relevance of the questions ☐ Contribution to the discussion	Draws attention to points missed by the reporter or the opponent
References, proper citations of ideas and input of others		This sheet will be collected by the fight assistant, so we can scan it and
Novelty of the report		fight assistant, so we or fight assistant, so we or fight assistant, so we or fight assistant as fight assistant as a second of the fight assistant, so we or fight assistant as a single solution of the fight assistant.

☐ Novelty of the report ☐ Contribution to the discussion

Final Grade: Reporter

Final Grade: Opponent



Final Grade: Reviewer Revised after IOC feedback and approved by EC on 2011-11-03



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Scoring Guideli	nes							me and	olem no.: 10
		Juror: <u>G</u>	JENA	41 PM G-S	Sign	ature: _	e 7 (= Ye	march
A report should include: • a presentation of the appropriate concerapplication of appropriate mathematics • appropriate) • linking of theoretical and complex ideas in an effective and understand	reasonable e <i>experiment</i> e	experimental te al findings to d	chnique t	o <i>aather</i> and	record o	lata (or	demonst	rate the n	henomena if
An opposition should show that • the opponent challenged the reporter's u appropriate mathematics presented • the o opponent appreciated and highlighted the s	ı nderstandir Opponent cr i	itiqued the expe	erimental	technique us	and <i>prii</i> ed and q	<i>nciples</i> uestion	• the opp ed the <i>val</i>	onent un	derstood the ne <i>data</i> • the
A review should show that: • the reviewer succeeded in giving an objeimportant aspects (especially the controver such personal opinions were informative, no principles and appropriate mathematics use	r <i>sial</i> ones) ● <i>on-trivial</i> an	the reviewer's , Id demonstrated	<i>personal (</i> d, where p	a ninian was	in avidan	co Innt	hist runn	rficial abo	
 The grade for each of the three teams The reporter, opponent and reviewer Consider the following suggestions to Select each partial grade from each se Don't punish missing 'answers' when it 	each <i>start</i> add to or e ection and s	with 5 points. deduct from th write it in the c	ne initial . correspoi	5 points.					
Rep.: Russia 5		: Austra	•	5	ı		Fance		5
Physics ±3 Correct and relevant physics Scientific approach Validity of conclusions Accurate answers	☑ Sci	cs ±3 rrect and rele entific approa idity of concli	ach usions	ysics		Scienti Validity	t and re fic appro	clusions	
Presentation ±1 Clear and understandable Appropriate manner Overall impression	☐ Cle	ntation ±1 ar and unders propriate mar erall impression	standab nner	O le	Pre:	senta Clear a Approp	ition ±	: 1 erstanda anner	ible Rew
Reporter ±1 + (☐ Res	nent ±1 ponse to the	reporte	r's	Rev	iewe	r ±1	ough re	view of
technique(s) Structure Explanation of formulae and	solu Sho	ition ws the strong he report			r. HE E	eport a xpress	and disc es own	ussion opinioned or disc	about
symbols Appropriate models, conformity of dimensions	the	ls shortcomin report				eporte	r and th	e oppor	
Slides, on-site experiments, audio, video, as appropriate	1	evance of the tribution to t			b D	raws a y the r	ttentior eporter	to poir or the c	nts missed Opponent
References, proper citations of ideas and input of others						This she	eet will b) Me can -	ed by the scan it and scan please

Novelty of the report

Final Grade: Reporter

Contribution to the discussion

Revised after IOC feedback and approved by EC on 2011-11-03

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Fight (Round no.):	1 Room:	K Stage:	Problem no.:	10
Juror: STANISCAN	PANOS	Signature:	Pan- 2	

Revised after IOC feedback and approved by EC on 2011-11-03

A report should include:

• a presentation of the appropriate concepts, theories and principles of the problem • an explanation of the observed phenomena • an application of appropriate mathematics • reasonable experimental technique to gather and record data (or demonstrate the phenomena if appropriate) • linking of theoretical and experimental findings to draw suitable conclusions • an attempt to communicate difficult or complex ideas in an effective and understandable manner

An opposition should show that:

• the opponent challenged the reporter's understanding of the presented concepts, theories and principles • the opponent understood the appropriate mathematics presented • the opponent critiqued the experimental technique used and questioned the validity of the data • the opponent appreciated and highlighted the strengths and weaknesses of the report

A review should show that:

- the reviewer succeeded in giving an objective summary of the performances the reporter and opponent the reviewer appreciated the important aspects (especially the controversial ones) • the reviewer's personal opinion was in evidence (not just superficial observations) • such personal opinions were informative, non-trivial and demonstrated, where possible, the reviewer's understanding of concepts, theories, principles and appropriate mathematics used by the reporter and the opponent
- The grade for each of the three teams consists of a partial grade for *physics*, *presentation* and for their *specific role*.
- The reporter, opponent and reviewer each start with 5 points.

 Select each partial grade from each sec 	add to or deduct from the initial 5 points. ction and write it in the corresponding box. to questions were posed or not finding shortc	omings if there were none to find.
Rep.: Russia 5	Opp.: AUSTRALIA 5	Rev.: FRANCE 5
Physics ±3 + 0,5	Physics ±3	Physics ±3
Correct and relevant physics	Correct and relevant physics	☐ Correct and relevant physics
Scientific approach	Scientific approach	☐ Scientific approach
☐ Validity of conclusions	☐ Validity of conclusions	☐ Validity of conclusions
Accurate answers	☐ Accurate answers	☐ Accurate answers
Presentation ±1	Presentation ± 1 + 0,5	Presentation ±1 - 0,5
Clear and understandable	🗵 Clear and understandable	☐ Clear and understandable
Appropriate manner	Appropriate manner	☐ Appropriate manner
Overall impression	Overall impression	☐ Overall impression
Reporter ±1 + 0,5	Opponent ±1 $+ 0.5$	Reviewer ±1 -0,5
Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion
☐ Structure		
Explanation of formulae and	of the report	Expresses own opinion about topics presented or discussed
symbols	Finds shortcomings or errors in	☐ Relevance of questions to both the
Appropriate models, conformity of dimensions	the report Relevance of the questions	reporter and the opponent Draws attention to points missed
Slides, on-site experiments, audio, video, as appropriate	☐ Contribution to the discussion	by the reporter or the opponent
References, proper citations of ideas and input of others		This sheet will be collected by the
☐ Novelty of the report		This sheet will be con- fight assistant, so we can scan it and archive your partial grades – please
Contribution to the discussion		do not bend
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tend !				9	M	1	M					J

Fight (Round no.): Ro	om: <u>K</u>	Stage: 1	Problem no.:	1
Juror: JVANANTSIPA	<u>U</u> Signatur	e: <i>JKU/U</i>		

• a presentation of the appropriate concepts, theories and principles of the problem • an explanation of the observed phenomena • an application of appropriate mathematics • reasonable experimental technique to gather and record data (or demonstrate the phenomena if appropriate) • linking of theoretical and experimental findings to draw suitable conclusions • an attempt to communicate difficult or complex ideas in an effective and understandable manner

An opposition should show that:

• the opponent challenged the reporter's understanding of the presented concepts, theories and principles • the opponent understood the appropriate mathematics presented ◆ the opponent critiqued the experimental technique used and questioned the validity of the data ◆ the opponent appreciated and highlighted the strengths and weaknesses of the report

A review should show that:

- the reviewer succeeded in giving an objective summary of the performances the reporter and opponent the reviewer appreciated the important aspects (especially the controversial ones) • the reviewer's personal opinion was in evidence (not just superficial observations) • such personal opinions were informative, non-trivial and demonstrated, where possible, the reviewer's understanding of concepts, theories, principles and appropriate mathematics used by the reporter and the opponent
- The grade for each of the three teams consists of a partial grade for *physics*, *presentation* and for their *specific role*.
- The reporter, opponent and reviewer each start with 5 points.

 Select each partial grade from each sed 	add to or deduct from the initial 5 points. ction and write it in the corresponding box. no questions were posed or not finding shorter	Omings if there were none to find
Rep.: Jugare 5	Opp.: RUSCIA 5	Rev.: ASTRALTA 5
Physics ±3	Physics ±3	Physics ±3 +1
☐ Correct and relevant physics	Correct and relevant physics	Correct and relevant physics
←□ Scientific approach	☐ Scientific approach	☑ Scientific approach
✓☐ Validity of conclusions	☐ Validity of conclusions \	☐ Validity of conclusions
☐ Accurate answers	☐ Accurate answers	☐ Accurate answers
Presentation ±1 +1	Presentation ±1	Presentation ±1
☐ Clear and understandable	☐ Clear and understandable ✓	☐ Clear and understandable ~
☐ Appropriate manner	☐ Appropriate manner	☐ Appropriate manner
Overall impression	Overall impression	☐ Overall impression +
Reporter ±1	Opponent ±1	Reviewer ±1
Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion
Structure	Shows the strong and weak points	1 . /
Explanation of formulae and	of the report	Expresses own opinion about topics presented or discussed
symbols	Finds shortcomings or errors in the report	Relevance of questions to both the reporter and the opponent
 Appropriate models, conformity of dimensions 	☐ Relevance of the questions	☐ Draws attention to points missed
Slides, on-site experiments, audio, video, as appropriate	☐ Contribution to the discussion **	by the reporter or the opponent
References, proper citations of ideas and input of others		This sheet will be collected by the fight assistant, so we can scan it and
☐ Novelty of the report		fight assistant, so we con archive your partial grades – please
☐ Contribution to the discussion		do not bend
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Final Grade: Opponent

Revised after IOC feedback and approved by EC on 2011-11-03



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Scoring Guidelin	M O C	m: Stage: Problem no.:				
_	Juror: FRANCISCO	Signature:				
application of appropriate mathematics • re	ets, theories and principles of the problem • an easonable experimental technique to gather and experimental findings to draw suitable conclusionable manner	record data (or demonstrate the nhenomena if				
An opposition should show that: • the opponent challenged the reporter's un appropriate mathematics presented • the opponent appreciated and highlighted the st.	nderstanding of the presented concepts, theories pponent critiqued the experimental technique us	and <i>principles</i> • the opponent understood the ed and questioned the <i>validity</i> of the <i>data</i> • the				
important aspects (especially the controvers	ctive summary of the performances the reporter sial ones) • the reviewer's personal opinion was in on-trivial and demonstrated, where possible, the red d by the reporter and the opponent	n evidence (not just superficial observations)				
 The reporter, opponent and reviewer e Consider the following suggestions to e Select each partial grade from each sec 	consists of a partial grade for <i>physics, presen</i> each <i>start with 5 points</i> . add to or <i>deduct</i> from the initial <i>5 points</i> . ction and <i>write it</i> in the corresponding box. to questions were posed or not finding short					
Rep.: General Samuel Cain 5	Opp.: RUSSIA Kunlovih Panel 5	Rev.: AUSTRALIA 5				
Physics ±3	Physics ±3	Physics ±3				
Correct and relevant physics	Correct and relevant physics	Correct and relevant physics				
Scientific approach	☐ Scientific approach	Scientific approach				
☐ Validity of conclusions		☐ Validity of conclusions				
Accurate answers	☐ Accurate answers	☐ Accurate answers				
Presentation ±1	Presentation ±1	Presentation ±1				
Clear and understandable	Clear and understandable.	Clear and understandable				
☐ Appropriate manner	☐ Appropriate manner ✓	Appropriate manner				
Overall impression	☐ Overall impression ✓	Overall impression				
Reporter ±1	Opponent ±1	Reviewer ±1				
Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion				
☐ Structure /	☐ Shows the strong and weak points	Expresses own opinion about				
Explanation of formulae and ** symbols	of the report Finds shortcomings or errors in	topics presented or discussed Relevance of questions to both the				
Appropriate models, conformity of dimensions	the report	reporter and the opponent				
Slides, on-site experiments, audio, video, as appropriate *	Relevance of the questions Contribution to the discussion	Draws attention to points missed by the reporter or the opponent				
References, proper citations of ideas and input of others		This sheet will be collected by the				
☐ Novelty of the report ⊀		This sheet will be constant and fight assistant, so we can scan it and archive your partial grades – please				

Final Grade: Reporter Final Grade: Opponent

☐ Contribution to the discussion ✓

Final Grade: Reviewer Revised after IOC feedback and approved by EC on 2011-11-03

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Contribution to the discussion

Scoring Guide	linoc			m: K Stage: 1	Problem no.:			
Scoring Guide	IIIES	Juror: Nivat	Pusindae	Signature:				
A report should include: • a presentation of the appropriate con application of appropriate mathematics appropriate) • linking of theoretical accomplex ideas in an effective and understand of the complex ideas in an effective and understand in the complex ideas in an effective and understand in the complex ideas in an effective and understand in the complex ideas in an effective and understand in the complex ideas in an effective and understand in the complex ideas in an effective and understand in the complex ideas ideas in the complex ideas in the complex ideas in the complex ideas in the complex ideas ideas in the complex ideas id	s • reasonable e nd <i>experiment</i>	experimental techniq al findings to draw :	ue to <i>aather</i> and	record data (or demonstrate	the nhenomena i			
An opposition should show th • the opponent challenged the reporter appropriate mathematics presented • th opponent appreciated and highlighted th	at: 's understandir	g of the presented co	ital technique us	and <i>principles</i> • the opponer ed and questioned the <i>validit</i> ;	nt understood the			
A review should show that: • the reviewer succeeded in giving an a important aspects (especially the control such personal opinions were informative principles and appropriate mathematics	bjective summ versial ones) •	ary of the performar the reviewer's person d demonstrated, whe	ices the <i>reporter</i> nal opinion was i	n evidence (not just superficie	al observations)			
 The reporter, opponent and review Consider the following suggestions Select each partial grade from each Don't punish missing 'answers' whe Rep.: France	to add to or a section and a section and a section and a section	deduct from the init	sponding box.	l	to find.			
5] Opp.	S FMJ>16	5	Rev.: Australia	5			
Physics ±3	Physi	cs ±3	1	Physics ±3	Philippiness and the second se			
Correct and relevant physics		rect and relevant	physics	Correct and releva	int physics			
Scientific approach		entific approach		☐ Scientific approach	ำ			
☐ Validity of conclusions		idity of conclusion	าร	☐ Validity of conclus	ions			
△ Accurate answers ———		urate answers	grand distance occurrence and an accompany occurred and accompany	☐ Accurate answers				
Presentation ±1	Prese	ntation ±1	4) to Classics	Presentation ±1	q.			
2 Clear and understandable	☑ Cle	ar and understand	dable	☐ Clear and understa	andable			
Appropriate manner	l —	propriate manner		☐ Appropriate mann				
Overall impression	☐ Ove	rall impression		☐ Overall impression				
Reporter ±1	Орро	nent ±1	- Garanning	Reviewer ±1	() the same particular to the same particular			
Quality of experimental technique(s)	☐ Res	ponse to the repo	orter's	Provides a thoroug report and discussi	h review of on			
☐ Structure	☑ Sho	ws the strong and	l weak points	Expresses own opi	nion about			
Explanation of formulae and symbols	of ti	ne report Is shortcomings o		topics presented o	r discussed ions to both t			
Appropriate models, conformity	the	report		reporter and the o	ponent			
of dimensions Slides, on-site experiments, audi video, as appropriate		vance of the que tribution to the di		Draws attention to points missed by the reporter or the opponent				
References, proper citations of ideas and input of others				This sheet will be co	ollected by the			
Novelty of the report				This sheet will be do fight assistant, so we archive your partial	CHI Prairie			

Final Grade: Reporter

Final Grade: Opponent

Final Grade: Reviewer



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Fight (Round no.):	Room:	κ Stage: Λ	Problem no_:
Juror: TOMÁS	BEDVŠEKS	ignature:	1 B20

• a presentation of the appropriate concepts, theories and principles of the problem • an explanation of the observed phenomena • an application of appropriate mathematics • reasonable experimental technique to gather and record data (or demonstrate the phenomena if appropriate) • linking of theoretical and experimental findings to draw suitable conclusions • an attempt to communicate difficult or complex ideas in an effective and understandable manner

An opposition should show that:

• the opponent challenged the reporter's understanding of the presented concepts, theories and principles • the opponent understood the appropriate mathematics presented ● the opponent critiqued the experimental technique used and questioned the validity of the data ● the opponent appreciated and highlighted the strengths and weaknesses of the report

A review should show that:

- the reviewer succeeded in giving an objective summary of the performances the reporter and opponent the reviewer appreciated the important aspects (especially the controversial ones) • the reviewer's personal opinion was in evidence (not just superficial observations) • such personal opinions were informative, non-trivial and demonstrated, where possible, the reviewer's understanding of concepts, theories, principles and appropriate mathematics used by the reporter and the opponent
- The grade for each of the three teams consists of a partial grade for physics, presentation and for their specific role.
- The reporter, opponent and reviewer each start with 5 points.
- Consider the following suggestions to add to or deduct from the initial 5 points.

Select each partial grade from each seDon't punish missing 'answers' when r	ction and write it in the corresponding box. no questions were posed or not finding shortc	omings if there were none to find.				
Rep.: FRANCE 5	Opp.: RUSSIA 5	Rev.: AUSTRALIA 5				
Physics ±3	Physics ±3	Physics ±3 +4.5				
☐ Correct and relevant physics☐ Scientific approach☐ Validity of conclusions	☐ Correct and relevant physics☐ Scientific approach☐ Validity of conclusions	☐ Correct and relevant physics ☐ Scientific approach ☐ Validity of conclusions				
Presentation ±1	☐ Accurate answers Presentation ±1 -0.5	☐ Accurate answers Presentation ±1 → 1				
☐ Clear and understandable☐ Appropriate manner☐ Overall impression	☐ Clear and understandable ☐ Appropriate manner ☐ Overall impression	☐ Clear and understandable ☐ Appropriate manner ☐ Overall impression				
Reporter ±1	Opponent ±1 -0.5	Reviewer ±1 + 0.5				
Quality of experimental technique(s)	Response to the reporter's solution	Provides a thorough review of report and discussion				
☐ Structure☐ Explanation of formulae and	Shows the strong and weak points of the report	Expresses own opinion about topics presented or discussed				
symbols Appropriate models, conformity of dimensions	Finds shortcomings or errors in the report	Relevance of questions to both the reporter and the opponent				
Slides, on-site experiments, audio, video, as appropriate	☐ Relevance of the questions ☐ Contribution to the discussion	Draws attention to points missed by the reporter or the opponent				
References, proper citations of ideas and input of others		This sheet will be collected by the fight assistant, so we can scan it and				
☐ Novelty of the report		fight assistant, so we con archive your partial grades – please				
Contribution to the discussion		do not bend				

Final Grade: Reporter

Final Grade: Opponent



Cooking Carial 1'	Fight (Round no.):	Room	n: K Stage:	Proble	m no.:
Scoring Guidelines	Juror: G. JEN	MACG	Signature:	357	nan g
A report should include: • a presentation of the appropriate concepts, theories application of appropriate mathematics • reasonable exappropriate) • linking of theoretical and experimental complexities in an effective and report in the complexities of the complexit	(perimental technique t I <i>findings</i> to draw <i>suit</i> i	to <i>aather</i> and r	erord data for demon	ectrate the nha	
An opposition should show that: • the opponent challenged the reporter's understanding	of the presented conc	ents theories :	and nrinciples a the o	nnonont undo	rate and the
appropriate mathematics presented • the opponent crit opponent appreciated and highlighted the strengths and A review should show that: • the reviewer succeeded in giving an objective summa important general (expectable strength).	weaknesses of the repo	ort			
important aspects (especially the controversial ones) • ts such personal opinions were informative, non-trivial and principles and appropriate mathematics used by the repo	he reviewer's <i>personal</i> demonstrated, where r	oninian was in	avidance land but no	manification to the second	
 The grade for each of the three teams consists of The reporter, opponent and reviewer each start w Consider the following suggestions to add to or d Select each partial grade from each section and w Don't punish missing 'answers' when no questions 	vith 5 points . educt from the initial rite it in the correspo	5 points.			*
Rep.: France 5 Opp.	Russia	- 5	Rev.: Aug	Halia	5
Scientific approach Validity of conclusions Validity of conclusions	rect and relevant phontific approach dity of conclusions arate answers	nysics	Physics ±3 Correct and Scientific app Validity of co	oroach Inclusions	rsics
Clear and understandable Appropriate manner App	rtation ±1 r and understandab ropriate manner rall impression	ole .	Presentation Clear and und Appropriate Overall impre	derstandabl manner	**************************************
solut	onse to the reporte ion		Reviewer ±1 Provides a the report and di	orough revie scussion	O ew of
Explanation of formulae and symbols of the Appropriate models, conformity	,	rrors in	Expresses ow topics presen Relevance of reporter and	ted or discu: auestions to	ssed both the
Slides, on-site experiments, audio, video, as appropriate	rance of the question ribution to the discu	1	Draws attenti by the reporte		
References, proper citations of ideas and input of others Novelty of the report Contribution to the discussion			This sheet will fight assistant, archive your F	FO MIN CSIII DUNI	

Final Grade: Reporter

Final Grade: Reviewer Revised after IOC feedback and approved by EC on 2011-11-03

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Fight (Round no.):	$\frac{1}{1}$ Room:	K Stage: _	Problem no.:	
Juror: STANISCAV	PAUOS	Signature:	Pan-L	

• a presentation of the appropriate concepts, theories and principles of the problem • an explanation of the observed phenomena • an application of appropriate mathematics • reasonable experimental technique to gather and record data (or demonstrate the phenomena if appropriate) • linking of theoretical and experimental findings to draw suitable conclusions • an attempt to communicate difficult or complex ideas in an effective and understandable manner

An opposition should show that:

• the opponent challenged the reporter's understanding of the presented concepts, theories and principles • the opponent understood the appropriate mathematics presented • the opponent critiqued the experimental technique used and questioned the validity of the data • the opponent appreciated and highlighted the strengths and weaknesses of the report

A review should show that:

• the reviewer succeeded in giving an objective summary of the performances the reporter and opponent • the reviewer appreciated the important aspects (especially the controversial ones) • the reviewer's personal opinion was in evidence (not just superficial observations) • such personal opinions were informative, non-trivial and demonstrated, where possible, the reviewer's understanding of concepts, theories, principles and appropriate mathematics used by the reporter and the opponent

The grade for each of the three teams consists of a partial grade for physics, presentation and for their specific role.

 Select each partial grade from each sec 	each start with 5 points. add to or deduct from the initial 5 points. ction and write it in the corresponding box. o questions were posed or not finding shortc	comings if there were none to find.
Rep.: FRAUCE 5	Opp.: Russia 5	Rev.: AUSTRALIA 5
Physics ±3 Correct and relevant physics Scientific approach	Physics ±3 ☐ Correct and relevant physics ☐ Scientific approach	Physics ±3 Correct and relevant physics Scientific approach
☐ Validity of conclusions ☐ Accurate answers	☐ Validity of conclusions ☐ Accurate answers	☐ Validity of conclusions ☐ Accurate answers
Presentation ±1 ☐ Clear and understandable ☐ Appropriate manner ☐ Overall impression Reporter ±1 ☐ Quality of experimental technique(s) ☐ Structure ☐ Explanation of formulae and symbols ☐ Appropriate models, conformity of dimensions ☐ Slides, on-site experiments, audio, video, as appropriate	Presentation ±1 ☐ Clear and understandable ☐ Appropriate manner ☐ Overall impression Opponent ±1 ☐ Response to the reporter's solution ☐ Shows the strong and weak points of the report ☐ Finds shortcomings or errors in the report ☐ Relevance of the questions ☐ Contribution to the discussion	Presentation ±1 + 0,5 ☐ Clear and understandable ☐ Appropriate manner ☐ Overall impression Reviewer ±1 + 0,5 ☐ Provides a thorough review of report and discussion ☐ Expresses own opinion about topics presented or discussed ☐ Relevance of questions to both the reporter and the opponent ☐ Draws attention to points missed by the reporter or the opponent
References, proper citations of ideas and input of others Novelty of the report Contribution to the discussion		This sheet will be collected by the fight assistant, so we can scan it and archive your partial grades – please do not bend

Final Grade: Reporter Final Grade: Opponent

Revised after IOC feedback and approved by EC on 2011-11-03