

Introduction to Focus Groups

International High School Teacher Programme 2019



How and when?

09:00 → 12:30	Lectures	40/S2-A01 - Salle Anderson	
09:00	Particle Accelerators 1/2 Speaker: Dr Simone Gilardoni (CERN)	1h 30m	
10:30	Coffee Break	15m	
10:45	Particle Accelerators 2/2 Speaker: Dr Simone Gilardoni (CERN)	1h 30m	
12:30	Lunch Break	1h	
13:30 → 17:00	Lectures	500/1-001 - Main Auditorium	
13:30	Introduction to Focus Groups Speaker: Jeff Wiener (CERN)	30m	
14:00	Errors and Uncertainty in Particle Physics Speaker: André David (CERN)	1h 30m	
15:30	Coffee Break	30m	
16:00	First Questions & First Answers Speaker: Kristof Schmieden (CERN)	1h	
17:45 → 22:00	Social Event		
17:45	Bowling & Pizza	4h 15m	
	A bus will pick up the whole group in front of the CERN hotel (Building 39) at 17:45! bowlingland.ch		

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WEEK1

FG Session 1

Wednesday, 10 July
15:30-17:00

FG Session 2

Thursday, 11 July
16:30-17:30

WEEK2

FG Session 3

Monday, 15 July
16:00-17:30

FG Session 4

Thursday, 18 July
14:00-17:00

Last day of HST2019

FG Final Reports

Friday, 19 July
9:00-12:30

Which topics?

Which topics?

- FG1 Particle Accelerators
- FG2 Particle Physics & Errors and Uncertainty
- FG3 Particle Detectors
- FG4 Medical Applications of Particle Physics
- FG5 Computing in Particle Physics
- FG6 Theoretical Physics & Higgs Physics
- FG7 Data Analysis in Particle Physics
- FG8 Antimatter Research
- FG9 Engineering & Future Accelerators

Aims and goals?



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Be creative



Aims and goals?

Be creative
Collaborate



Aims and goals?

Be creative
Collaborate
Share your experiences



Aims and goals?

Be creative
Collaborate
Share your experiences
Learn from your colleagues



Aims and goals?

Be creative
Collaborate
Share your experiences
Learn from your colleagues
Create and develop *something*

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Create and develop *something*

Independently & self-organised!

Aims and goals?

Be creative
Collaborate
Share your experiences
Learn from your colleagues
Create and develop **something**

Present the results and outcomes
of your focus group through a
detailed and extensive final report

Independently & self-organised!

Aims and goals?

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Create and develop **something**

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5x2mins + 5mins

Aims and goals?

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Create and develop **something**

Present the results and outcomes
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Share the results with your
students and your colleagues

Independently & self-organised!

5x2mins + 5mins

Aims and goals?

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Send us feedback!

Process

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Guiding research questions about the FG topics

- A) To what extent is the topic featured in your curriculum?
- B) Which students' conceptions about the topic do you know?
- C) What is your experience with teaching the topic in your classroom?
- D) Which words and phrases can cause difficulties and misunderstandings?
- E) Which aspects of the topic do you consider challenging to teach to students?
- F) Which aspects of the topic do you think can be appropriately introduced in the classroom?

FG assignment

Start Time	End Time	Activity	Duration	Location	Icons
09:00 → 13:00 Lectures 40/S2-C01 - Salle Curie					
09:00		Engineering at CERN Speaker: Susana Izquierdo Bermudez (CERN)	1h 15m		[edit] [refresh]
10:15		Coffee Break	15m		[refresh]
10:30		Future Accelerators Speaker: Michael Benedikt (CERN)	1h 15m		[edit] [refresh]
11:45		Coffee Break	15m		[refresh]
12:00		Final Questions & Final Answers Speaker: Kristof Schmieden (CERN)	1h		[edit] [refresh]
13:00	14:00	Lunch Break	1h		[refresh]
14:00 → 17:00 Focus Groups [edit]					
14:00		Session 4	3h		[edit] [refresh]
17:00	17:30	HST2019 GROUP PICTURE!!	30m		[refresh]

Output

Output

Guidelines for the final report

1) Curriculum & classroom connections

Highlight potential connections to the various curriculums and your individual teaching practises

2) Key ideas

Showcase the most important aspects of the topic that you consider to be key for a meaningful instruction

3) Potential students' conceptions & challenges

Illustrate elements of the topic that might obstruct a successful introduction in the classroom

4) Helpful material and resources

Reference any material that you find useful for your students and/or your colleagues

5) Best practice example

Summarise your findings through a brief outline of an instructional strategy

Output

(leave eight 14 pt blank lines here)

Focus group title (Arial 14pt, bold, left aligned)
(leave one 14 pt blank line here)

Author One¹, Author Two², Author Three³, Author Four⁴, Author Five⁵ (Arial 10pt, left aligned)
+ Name of School, City, Country author.one@email.com (Arial 8pt, left aligned)
+ Name of School, City, Country author.two@email.com (Arial 8pt, left aligned)
+ Name of School, City, Country author.three@email.com (Arial 8pt, left aligned)
+ Name of School, City, Country author.four@email.com (Arial 8pt, left aligned)
+ Name of School, City, Country author.five@email.com (Arial 8pt, left aligned)
(leave four 8pt blank lines here)

Key ideas (Heading, Arial 10pt, bold, left aligned)
(leave one 10pt blank line here)
Showcase the most important aspects of the topic that you consider to be key for a meaningful instruction in the classroom. (Body text, Arial 10pt, justified)
(leave two 10pt blank lines here)

Best practice example (Heading, Arial 10pt, bold, left aligned)
(leave one 10pt blank line here)
Summarise your findings through a brief outline of an instructional strategy. Explain how to best introduce the topic in your classroom. (Body text, Arial 10pt, justified)
(leave two 10pt blank lines here)

Questions?

jeff.wiener@cern.ch