

WP6: Outreach and Communication
International Masterclasses
Inspiration from IPPOG

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WP6

No	Task	Deliverable	Month
6.1	Masterclasses on flavour and neutrino physics	Belle II/T2K masterclasses organization in JENNIFER2 Belle II institutions	36/48
6.2	Summer School for physics students at KEK	2 summer student institutes at KEK	24/48
6.3	General public science communication	Outreach web portal with links to outreach events of JENNIFER2 institutions	24
6.4	PhD thesis co-supervision	Co-supervision of PhD students seconded for longer periods	48

International Masterclasses

IPPOG's Flagship

- ◆ High school students (15 – 19) are „scientists for one day“
- ◆ Get invited to a research institute or university
- ◆ Introductory talks (standard model, detectors, accelerators)
- ◆ 2 h measurement with real experimental data
- ◆ *International* video conference (2 – 5 inst. + CERN/Fermilab)



IMC: experiments

IMC 23: What do we expect?

Three settings:

- (1) Masterclasses at universities or research labs
- (2) Remote Masterclasses with students connecting individually
- (3) Remote Masterclasses with students in classrooms

→ We have experience and are prepared for all 3 cases!

Videoconference situation:

- Student groups connect (as before the pandemic)
- Individual students connect → one dedicated online week at CERN (6.-11.3.2023)
- Mixture of both. Not preferred, but cannot be avoided
- Moderators might not sit together

→ Zoom videoconferences (no webinars)

IMC: experiments

- ◆ LHC (ATLAS, ALICE, CMS, LHCb)
- ◆ MINERvA, NOvA
- ◆ Belle II
- ◆ MicroBooNE
- ◆ Particle Therapy
- ◆ IceCube, Auger
- ◆ LIGO/Virgo
- ◆ SESAME

IMC: experiments

IMC23 dates

LHC
Masterclasses



CERN program

- 13.2. - 31.3.2023 (6.-11.3. online week)
- Girls Masterclasses on 10.2.

**LHC and
Neutrino**
Masterclasses



Fermilab program

- 25.2. - 31.3.2023

Particle Therapy
Masterclasses



GSI program

- 18.2., 8.3., 11.3., 24.3., 31.3.2023
- Girls Masterclasses on 10.2. and 11.2.

Belle II
Masterclasses



KEK program

- 7.3., 15.3., 23.3.
- Additional dates for US and Japan tba

27.10.2022

Masterclass report



How to get new IMC topic through

- ◆ Documentation
- ◆ Pilot run
- ◆ Steering group approves
- ◆ Can run as MC before
- ◆ ?Spring campaign stays for LHC?
- ◆ ?New autumn campaign to be launched for non-LHC experiments?
- ◆ Data, not Monte Carlo!



**International Masterclasses
Steering Group**

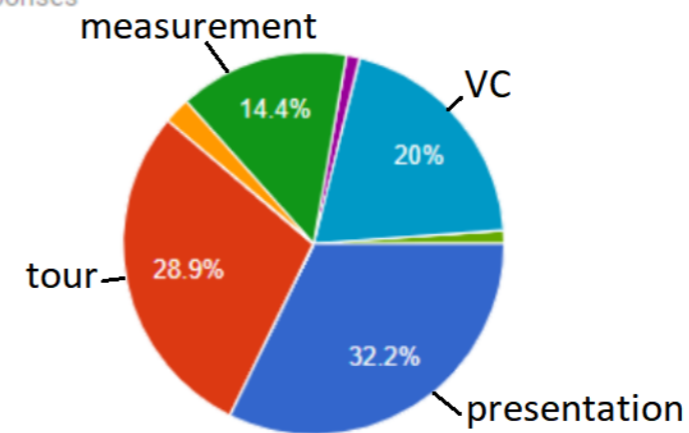
Approval of measurements

Neutrino Masterclasses

- MINERvA Masterclass – passed tests and part of IMC2019
- MicroBooNE – expected for IMC2020
- Plans and inquiries for more

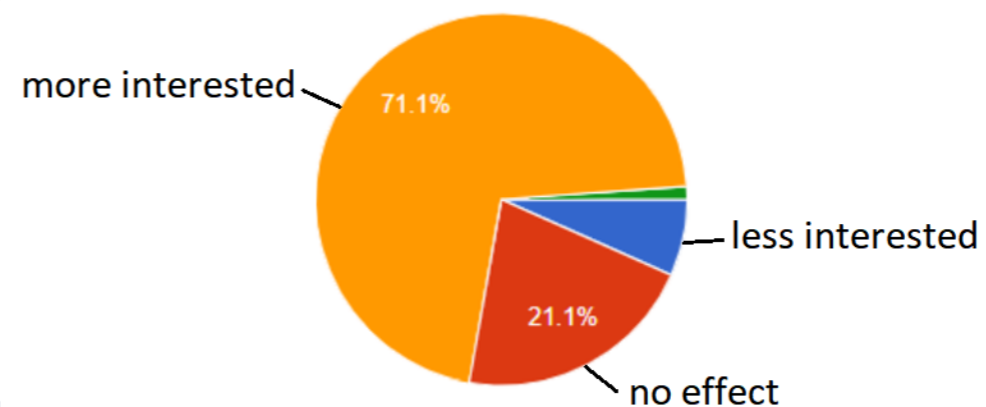
What part of the masterclass did you like best?

90 responses



How did the masterclass affect your interest in physics?

90 responses



More at <http://tiny.cc/y7d16y>.

23.05.2019

IPPOG meeting GSI



Thanks!