

# Ideas for the WP7 Detector School

Vitaly Vorobyev (BINP)  
Organizing Committee meeting  
September 16<sup>th</sup>, 2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 871072

**CREMLIN PLUS**  
Connecting Russian and European Measures  
for Large-scale Research Infrastructures



# General structure

- **Numbers**
  - School duration: from 14 to 21 days. Summer season
  - Number of lecturers and instructors: from 10 to 20
  - Number of students: about 50 (master and PhD students, young scientists)
- **Daily activity**
  - Before lunch: lectures
  - After lunch: work on project (hands-on)
  - Evening: informal communication with lecturers
- **Last day**
  - Student projects presentations (and a party, of course)

# Projects

- A group of ~4 students
  - is supervised by an instructor
  - work on a single project during the whole school duration
- A project is related to some experimental setup
- Each project implies working on a not-so-trivial problem and includes
  - Studying relevant literature
  - Planning and assembling experimental setup, and conducting experiments
  - Data analysis and making written report
- Detailed discussion with the instructor at the beginning
  - “What problem we are going to solve?”
  - A to-do list
  - Clear responsibility assigned to each group member
  - Timeline up to the project report

# Informal communications

- A one-hour meeting of group with lecturer at evening (or at lunchtime)
  - Students may ask questions about lecturer's course or about physics/profession in general
  - Each day new lecturer
  - Coffee and cookies can be served

# Instructor duties

- An instructor preparing documentation of his project in advance
  - Experimental setup description, equipment required
  - Detailed description of the project including materials for the students
    - Project objectives, possible distribution of duties for a group, list of skills a student would gain doing the project, ...
- It is a time-consuming work. Can we pay for that?

# Lecturer duties

- A typical course consists of 3-5 lectures, 90 min each
- Before the school lecturer
  - Sends course program
  - Writes lecture notes
- Each student obtains lecture notes for all courses at the beginning of the school
  - It gives an opportunity to prepare for each lecture and learn better
- Again, it is a time-consuming work for lecturers. Can we pay for that?

# Money

- Participation in school is paid
  - An employer or university usually pays
  - There are a small number of free participation slots
- Travel expenses and accommodation for lecturers and instructors are covered by school
- Can we use WP8 resources to cover expenses related to traveling?
- The WP7 school money is mainly spent on
  - Projects equipment and its transportation
  - Payment for lecturers and instructors (beyond travel and accommodation)
  - School website development