TES HEP
Trans-European School of High Energy Physics
TESchool23
Bezmiechowa Górna,Bieszczady mountains, Poland
July 14 - July 22, 2023

# Welcome !

Bringing together European (and beyond) students

Teaching various aspects of high-energy physics, mainly focusing on experimental particle physics

…with the aim of reinforcing and encouraging the East-West Europe (and beyond…) scientific and pedagogical links.

After 2009 and 2015: 2023 back to Poland !

2017: Ljubljana, Slovenia

2018 Poltava, Ukraine

2019 Volyn region Ukraine

Bezmiechowa
Górna,
Johomaps 2006
Trieste

## LECTURES

| | |
|---|---|
| SM | Alexander Korchin |
| SM problems gauge and Flavours & BSM ideas | Stéphane Monteil |
| Detector Instrumentation | Sergey Barsuk<br>Clara Gaspar<br>Maxim Titov |
| Statistics | Stéphane Monteil |
| Feynman Graphs | Sebastian Sapeta |
| Exercises in data analysis (hands-on) | Rafał Staszewski |

**HANDS ON SESSIONS**

## FORMER STUDENTS PRESENTATIONS

Szymon Kukulak
Rafal Maciula
Klaudia Maj
Iwona Sputowska
Valeriia Zhovkovska

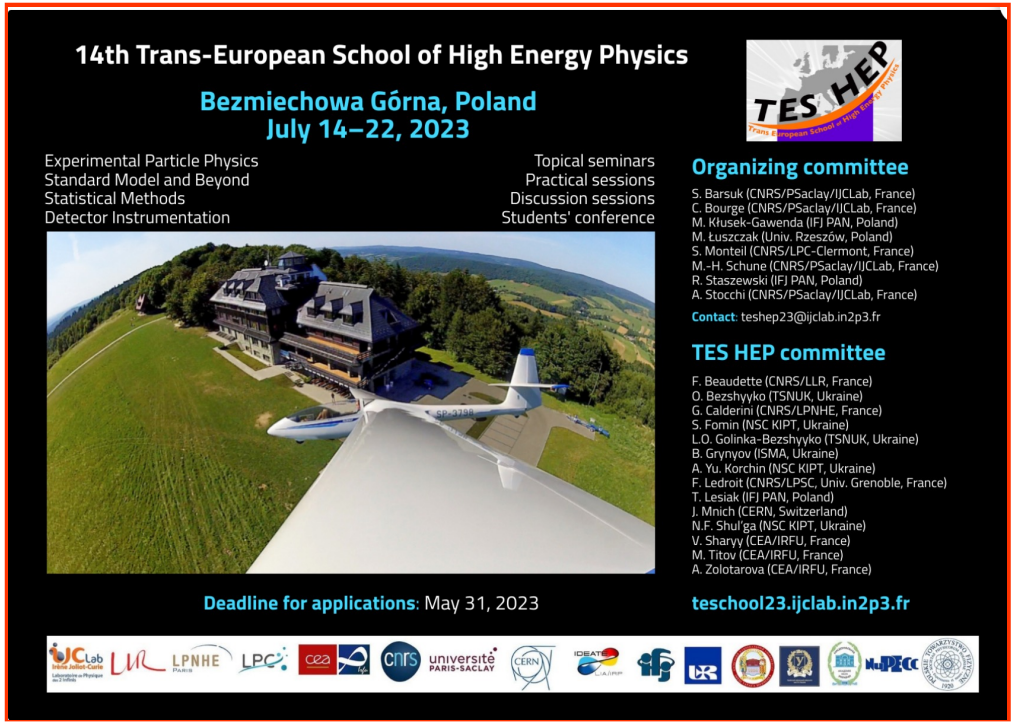
## TOPICAL HIGHLIGHTS

| | |
|---|---|
| Neutrinos Physics | Marie-Helene Schune |
| Cabibbo & Flavours emergence | Achille Stocchi |
| Cosmologie | Pierre Astier |
| QCD / Diffraction | Wolfgang Schafer |

## SEMINARS

Mariola Kłusek-Gawenda : photon-photon fusion in heavy-ion collisions
Antoni Marcinek : Electromagnetic effects on charge particles
Alex Fomin : the PERLE project

| | Saturday July 15 | Sunday July 16 | Monday July 17 | Tuesday July 18 | Wednesday July 19 | Thursday July 20 | Friday July 21 |
|---|---|---|---|---|---|---|---|
| 09:00-10:00 | Welcome | SM3 | Detectors2 | Topical Highlight1 | Topical Highlight2 | Topical Highlight3 | Topical Highlight4 |
| 10:00-11:00 | SM1 | SM4 | Detectors3 | Topical Highlight1 | Topical Highlight2 | Topical Highlight3 | Topical Highlight4 |
| 11:00-11:30 | Break | Break | Break | Break | Break | Break | Break |
| 11:30-12:30 | SM2 | BSM1 | Statistic1 | Topical Highlight1 | Topical Highlight2 | Topical Highlight3 | Topical Highlight4 |
| 12:30-13:30 | Detectors1 | BSM2 | Statistic2 | Detectors4 | Seminar1 | Seminar2 | Students presentation |
| 13:30-15:00 | Lunch | Lunch | Lunch | Lunch | Lunch | Lunch | Lunch |
| 15:00-16:00 | Hands-on Team1 / profs Team2 | Hands-on Team2 / profs Team1 | Students work with profs | Detectors5 | **Excursion** | Seminar3 | Students presentation until 17:30 |
| 16:00-17:00 | Hands-on Team1 / profs Team2 | Hands-on Team2 /profs Team1 | Students work with profs | Conference by former students | | Feynman Graph1 | |
| 17:00-17:30 | Break | Break | Break | Break | | Break | Break |
| 17:30-19:00 | Hands-on Team2 /Students work with profs – team1 | Hands-on Team1 /Students work with profs – team2 | **Football** | Conference by former students | | Feynman Graph2 | 18:30 Summary |
| 19:30-20:30 | Dinner | Dinner | Dinner | Dinner | **School Dinner ?** | Dinner | Dinner |
| 20:00-22:00 | | CERN : Past, Present and Future by C. Schaffer | | Discussions with former students | | | |




Please look at the list of professor/students groups

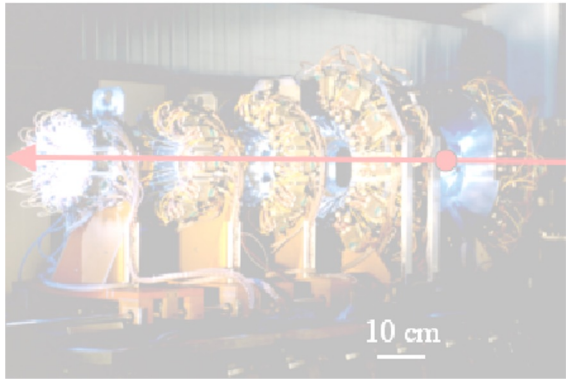
And the lists of groups for practical sessions

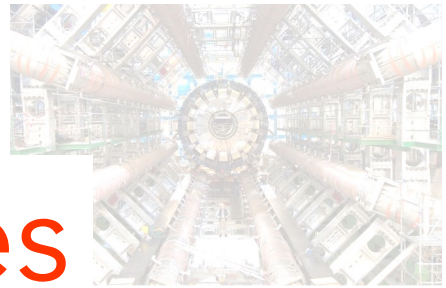
On the table: a shopping list (not going every day!) is something is urgently needed . Write your name and what is needed

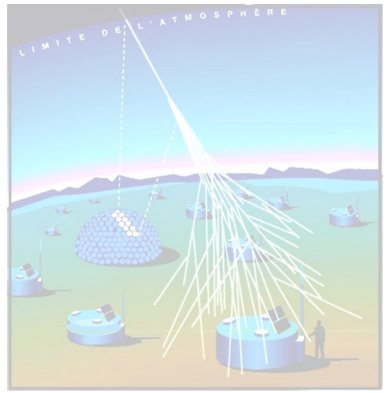
*Practical things*

Please check the announcement in the room
Coffee breaks are one floor up

Please do not use your laptop during the lectures

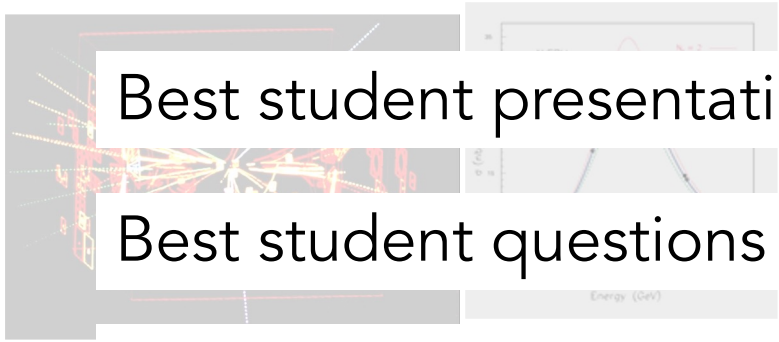







# Prizes

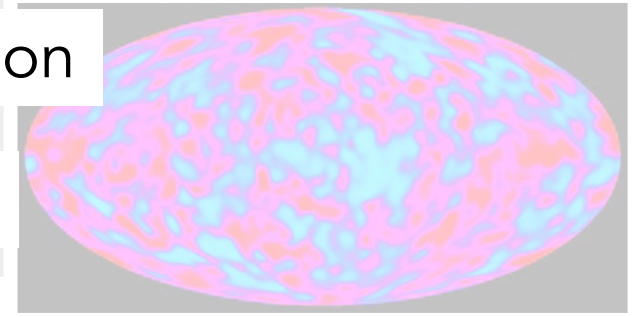


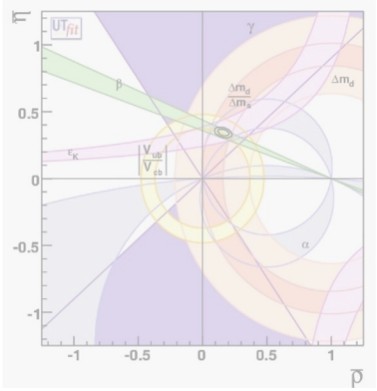



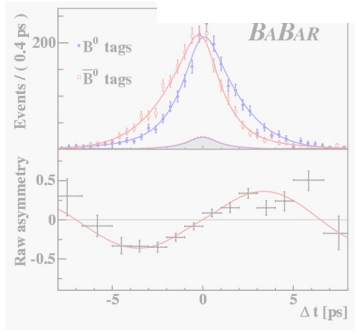
Best student presentation

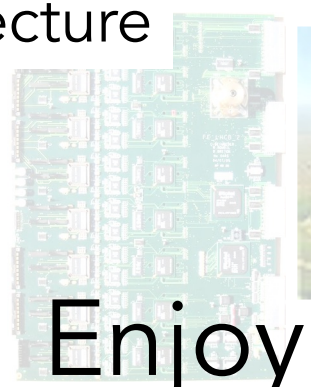
Best student questions

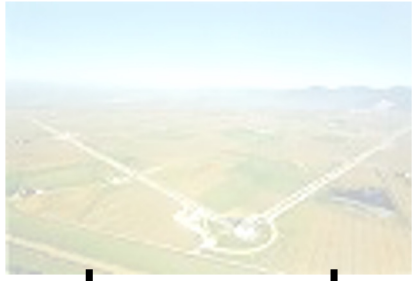
Best lecture

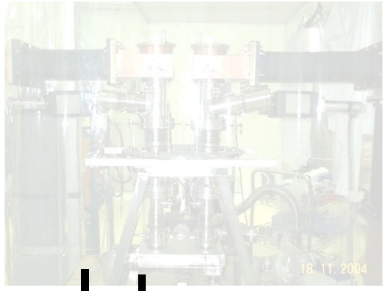


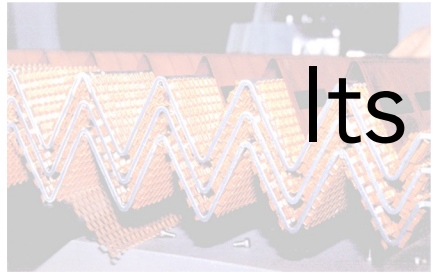






Enjoy the school !

Its success relies on you