

15th Trans-European School of High Energy Physics

Bezmiechowa Górna, Poland
July 11–20, 2024



Experimental Particle Physics
Standard Model and Beyond
Statistical Methods
Detector Instrumentation

Topical seminars
Practical sessions
Discussion sessions
Students' conference

Organizing committee

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L.O. Golinka-Bezshyyko (TSNUK, Ukraine)
B. Grynyov (ISMA, Ukraine)
A. Yu. Korchin (NSC KIPT, Ukraine)
T. Lesiak (IFJ PAN, Poland)
J. Mnich (CERN, Switzerland)
J. Rademacker (Bristol Univ., UK)
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M. Titov (CEA/IRFU, France)
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teschool24.ijclab.in2p3.fr



Welcome to

Trans-European School of High Energy Physics

Deadline for applications: April 30, 2024



University Gliding Centre, Bezmiechowa Górna



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.

The School was organised already in Poland in 2009 and 2015

2017: Ljubljana, Slovenia

2018 Poltava, Ukraine

2019 Volyn region Ukraine

After COVID pandemic and Russia aggression to Ukraine we organised the school in 2023 in Poland , here **close to the Ukrainian border**.

In 2024 we decided to organise the school here again !





Kyiv, Kharkiv, Sumy, Paris-Orsay, Krakow, Warsaw, Rzeszow, Tbilisi, Bristol, Bologna, CERN, Warwick, Edinburgh, Olomouc Marrakech, Casablanca





	11/7	12/7	13/7	14/7	15/7	16/7	17/7	18/7	19/7	20/7
Breakfast										
9:00-10:00		Introduction	SM 2	Accelerators 1	Accelerators 2	Accelerators 3	Topical : flavours & CPV	BSM	Future physics challenges	Departure
10:00-11:00		SM 1	SM 3	SM 4	Intro to QCD	Intro to QCD	Topical : flavours & CPV	BSM	Future physics challenges	
Break										
11:30-12:30		Detectors 1	Detectors 2	Detectors 3	Detectors 4	Topical : charm 50 years	Topical : flavours & CPV	Topical : Cosmic rays and CREDO	Future physics challenges	
12:30-13:30		Seminar 1 (Tadek)	Statistics	Statistics	Detectors 5	Topical : charm 50 years	Topical : flavours & CPV	Topical : Cosmic rays and CREDO	Seminar 4 (Mariola)	
Lunch										
15:00-16:00		Hands-on Team 2 / Work with Profs Team 1	Seminar 2 (Marta)	Hands-on Team 1 / Work with Profs Team 2	Excursion	Topical : charm 50 years	Seminar 3 (Iwona)	Topical : Cosmic rays and CREDO	Students conference	
16:00-17:00		Hands-on Team 2 / Work with Profs Team 1	Hot topic discussions (Achille)	Hands-on Team 1 / Work with Profs Team 2	Excursion	Topical : charm 50 years	Hot topic discussions (Achille)	Topical : Cosmic rays and CREDO	Students conference	
Break										
17:30-18:30	Conference Charpak (17h-19h)	Hands-on Team 1 / Work with Profs Team 2	Work with Profs	Hands-on Team 2 / Work with Profs Team 1	Excursion	Students-Profs work	« Football »	Students-Profs work	Students conference	
18:30-19:30	Conference Charpak (17h-19h)	Hands-on Team 1 / Work with Profs Team 2	Work with Profs	Hands-on Team 2 / Work with Profs Team 1	Excursion	Students-Profs work	« Football »	Students-Profs work	Summary	
Dinner										
Evening session			Statistics games	Statistics games		Intro to CERN				
	Arrival									

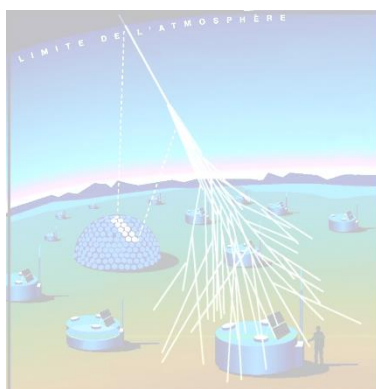
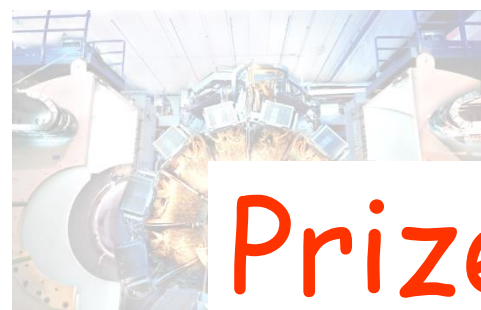
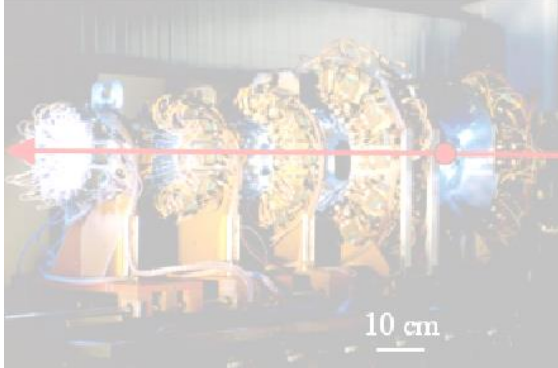
+ After dinner sessions with statistical games
+ Introduction to CERN

Work with professor to prepare the **Student Conference**

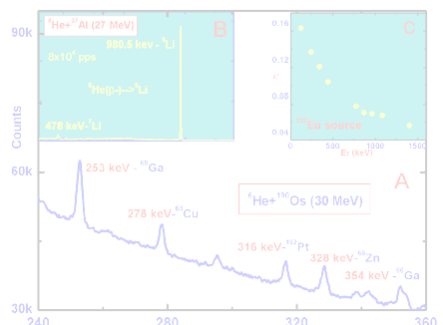
- Lectures
- Long Topical seminars
- Seminars
- Hand-on-Team sessions
- Hot topic discussion (your suggestions are also welcome !)

Lectures	
SM	Wolfgang Schaefer
BSM	Janusz Gluza
Detectors	Sergey Barsuk
Statistics	Jonas Rademaker
Accelerators	Pascal Dominik Hermes
Exercises in data analysis (hands-on)	Rafał Staszewski
Intro to QCD	Rafał Maciula
Future physics challenge	Vincenzo Vagnoni
Intro to CERN	Christophe Schaffer
Seminars	
Seminar 1: Future Circular Collider	Tadek Lesyak
Seminar 2: Photon induced processes in pp collisions	Marta Łuszczak
Seminar 3: Event-by-event correlations in heavy ions	Iwona Sputowska
Seminar 4: Photon-photon fusion in heavy-ion collisions	Mariola Kłusek-Gawenda
Topical highlight	
Charm 50 years	Sergey Barsuk & Guillaume Pietrzyk
Flavours & CPV	Achille Stocchi
Cosmic rays and CREDO	Robert Kaminski
Hot topics	Achille Stocchi

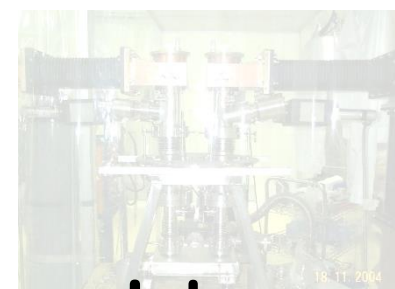
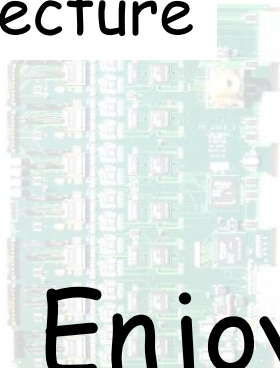
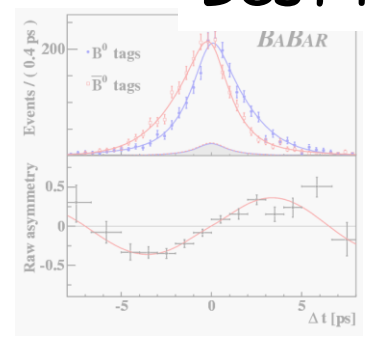
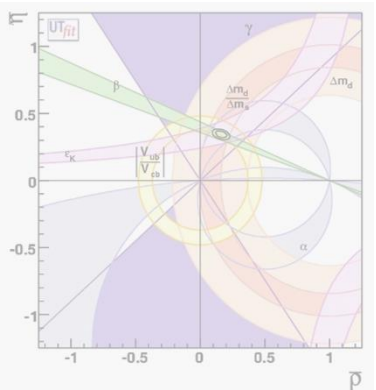
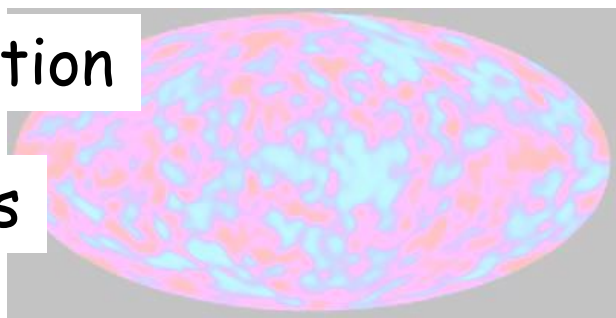
Presentation of the professors !



Prizes

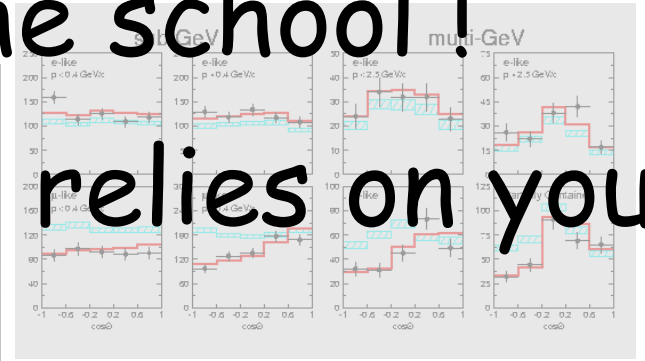
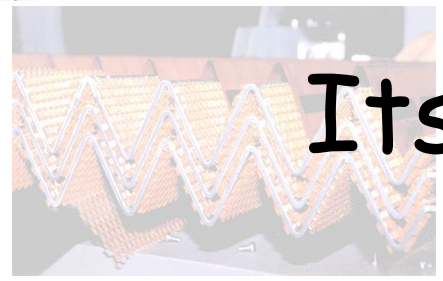
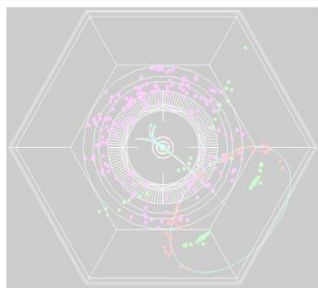


Best student presentation
Best student questions



Best lecture

Enjoy the school!



Its success relies on you