

# Trans-European School of High Energy Physics

Poltava, Ukraine

July 13-20, 2018



Experimental Particle Physics  
Standard Model & Beyond  
Instrumentation  
Accelerators  
Cosmology  
Statistics  
Topical Seminars

Practical Sessions  
Students' Conference

## Welcome to

# Trans-European School of High Energy Physics

## Program Committee

S. Barsuk (CNRS/UPSud/LAL, France)  
F. Beaudette (CNRS/LLR, France)  
C. Bourge (CNRS/UPSud/LAL, France)  
A. Bozek (IFJ PAN, Poland)  
G. Calderini (CNRS/LPNHE, France)  
V. Gligorov (CERN, Switzerland)  
L. O. Golinka-Bezshyyko (TSNUK, Ukraine)  
A. Yu. Korchin (NSC KIPT, Ukraine)  
S. Monteil (CNRS/LPC-Clermont, France)  
O. O. Nestulya (PUET, Ukraine)  
V. M. Pugatch (KINR, Ukraine)  
J. Rademacker (Wilson Phys. Lab, UK)  
S. Rigolet (French Embassy, Ukraine)  
M. Schmelling (MPI, Germany)  
M. H. Schune (CNRS/UPSud/LAL, France)  
V. Sharyy (CEA/IRFU, France)  
A. Stocchi (CNRS/UPSud/LAL, France)  
M. Titov (CEA/IRFU, France)

## Advisory Committee

C. Alexa (IFIN-HH, Romania)  
B. Grynyov (State Agency on Science, Ukraine)  
I. N. Kadenko (TSNUK, Ukraine)  
T. Lesiak (IFJ PAN, Poland)  
P. Levai (MTA KFKI RMKI, Hungary)  
J. Mnich (DESY, Germany)  
N.F. Shul'ga (NSC KIPT, Ukraine)  
V.Yu. Storzikhko (IAP-Sumy, Ukraine)

Deadline for applications: May 15, 2018

<http://teschool18.lal.in2p3.fr>

Contact: [teschool18@lal.in2p3.fr](mailto:teschool18@lal.in2p3.fr)



Полтава, Україна



The TES-HEP school brings together European (and beyond) students with the basic aim of teaching them 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.

La «Trans-European School of High Energy Physics»  
fête ses 10 ans



Транс-Європейська школа фізики високих енергій  
святкує 10 років

+ 2017: Ljubljana, Slovenia



**Clermont Ferrand, Dnipro, Hefei, Iasi, Kharkiv, Kyiv, Minsk, Nablus, Paris-Orsay, Riga, Sofia, Sumy, Tomsk**



Tomsk  
Russia

Hefei  
China

Nablus  
Palestine

## LECTURES

Professors		
Beyond Standard Model	Sébastien Descotes-Genon	1 hour
Cosmology	Pierre Astier	2 hours
Instrumentation	Sergey Barsuk//Maxim Titov	4 hours
Standard Model	Sébastien Descotes-Genon	5 hours
Statistics	Jonas Rademacker	2 hours
Understanding the nucleon structure: basic formalism, modern tools and open questions	Egle Tomasi	2 hours

## PRACTICAL SESSIONS

Topic	Professor
TD Toys + stat	Jonas Rademacker
GEANT4	Leonid Burmistrov
Data mining	Slava Sharyy
Practical work on instrumentation	Andrii Nagai

## TOPICAL WORKSHOPS

	Topics	Professors	
1	Neutral current workshop	Achille Stocchi	3 hours
2	CPV workshop	Stéphane Monteil	3 hours
3	Discovery of an accelerated Universe	Pierre Astier	3 hours
4	Higgs + SUSY	Maxim Titov	3 hours

## SEMINARS

Seminars		
Schaefer Christoph	1 hour	Seminar 1
Margaryta Alyokhina	1/2 hour	Seminar 2
Maksym Teklishyn	1/2 hour	Seminar 3
Igor Kirillin	1/2 hour	Seminar 4
Sergii Trofimenko	1/2 hour	Seminar 5



# Trans-European School of High Energy Physics

**Poltava, Ukraine**  
**July 13-20, 2018**

## THE PROGRAM

	Friday July 13th	Saturday July 14th	Sunday July 15th	Monday July 16th	Tuesday July 17th	Wednesday July 18th	Thursday July 19th	Friday July 20th
09:00-10:00	Introduction	SM & Beyond	SM & Beyond	Topical Workshop 1	[Teal bar]	Topical Workshop 2	Topical Workshop 3	Topical Workshop 4
10:00-11:00	SM & Beyond	SM & Beyond	SM & Beyond	Topical Workshop 1		Topical Workshop 2	Topical Workshop 3	Topical Workshop 4
11:00-11:30	Break	Break	Break	Break		Break	Break	Break
11:30-12:30	SM & Beyond	Data mining	Statistics	Topical Workshop 1		Topical Workshop 2	Topical Workshop 3	Topical Workshop 4
12:30-13:30	Instrumentation	Instrumentation	Instrumentation	Instrumentation		Seminar 1	Seminars 2&3	Seminars 4&5
13:30-16:00	Lunch	Lunch	Lunch	Lunch		Lunch	Lunch	Lunch
16:00-16:00	Nucleon structure	Cosmology	Statistics	Practical sessions Statistics / Geant 4		Practical sessions Data mining / Instrumentation	Students conference	Students conference
16:00-17:00	Nucleon structure	Cosmology	Physics battle setup					
17:00-17:30	Break	Break	Break	Break		Break	Break	Break
17:30-18:30	Students work with professors	Students work with professors	Students work with professors	Practical sessions Statistics / Geant 4		Football	Practical sessions Data mining / Instrumentation	Students conference
18:30-19:30								
19:30-20:30	Dinner	Dinner	Dinner	Dinner	School Dinner	Dinner	Dinner	Dinner
20:30-22:30				Physics battle session				

# Trans-European School of High Energy Physics

Poltava, Ukraine

July 13-20, 2018



Experimental Particle Physics  
Standard Model & Beyond  
Instrumentation  
Accelerators  
Cosmology  
Statistics  
Topical Seminars

Practical Sessions  
Students' Conference



Deadline for applications: May 15, 2018

<http://teschool18.lal.in2p3.fr>

Contact: [teschool18@lal.in2p3.fr](mailto:teschool18@lal.in2p3.fr)



## Program Committee

S. Barsuk (CNRS/UPSud/LAL, France)  
F. Beaudette (CNRS/LLR, France)  
C. Bourge (CNRS/UPSud/LAL, France)  
A. Bozek (IFJ PAN, Poland)  
G. Calderini (CNRS/LPNHE, France)  
V. Gligorov (CERN, Switzerland)  
L. O. Golinka-Bezshyyko (TSNUK, Ukraine)  
A. Yu. Korochin (NSC KIPT, Ukraine)  
S. Monteil (CNRS/LPC-Clermont, France)  
O. O. Nestulya (PUET, Ukraine)  
V. M. Pugatch (KINR, Ukraine)  
J. Rademacker (Wilson Phys. Lab, UK)  
S. Rigolet (French Embassy, Ukraine)  
M. Schmelling (MPI, Germany)  
M. H. Schune (CNRS/UPSud/LAL, France)  
V. Sharyy (CEA/IRFU, France)  
A. Stocchi (CNRS/UPSud/LAL, France)  
M. Titov (CEA/IRFU, France)

## Advisory Committee

C. Alexa (IFIN-HH, Romania)  
B. Grynyov (State Agency on Science, Ukraine)  
I. N. Kadenko (TSNUK, Ukraine)  
T. Lesiak (IFJ PAN, Poland)  
P. Levai (MTA KFKI RMKI, Hungary)  
J. Mnich (DESY, Germany)  
N.F. Shul'ga (NSC KIPT, Ukraine)  
V.Yu. Storzikhko (IAP-Sumy, Ukraine)



Please look at the list of professor/students groups

And the lists of groups for practical sessions

Proceedings

2 pages for the student presentation

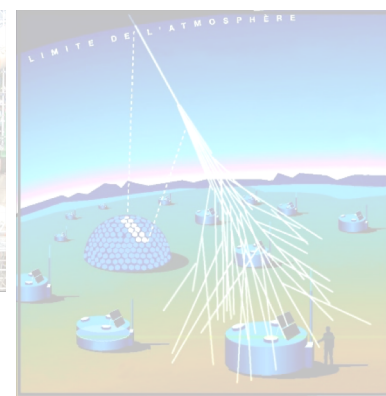
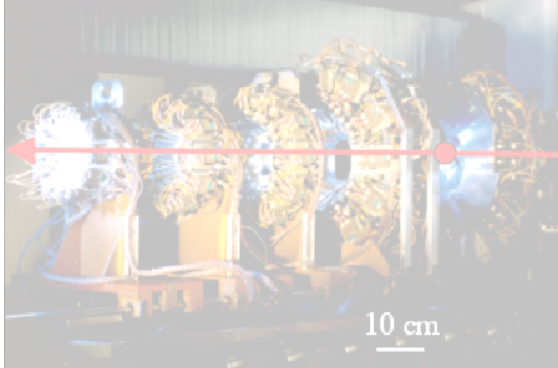
Deadline 15<sup>th</sup> November

## Practical things

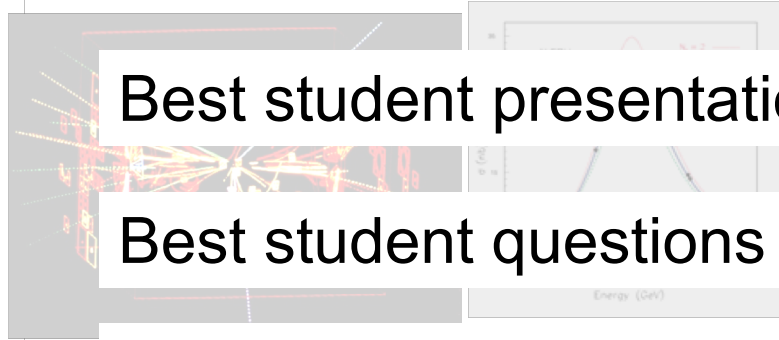
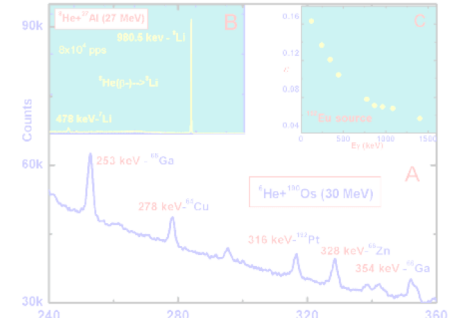
Please check the announcement board(s) and ... ask Catherine !

Please do not use your laptop during the lectures

Welcome drink this evening



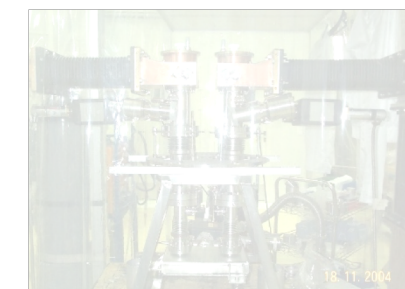
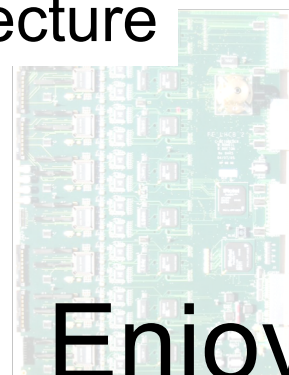
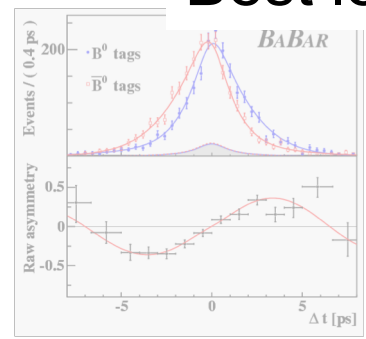
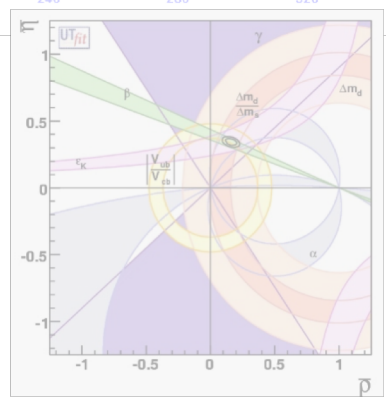
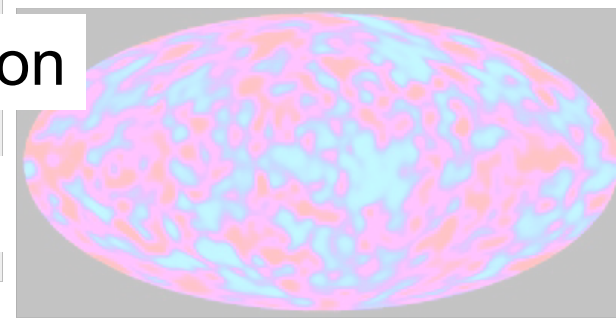
# Prizes



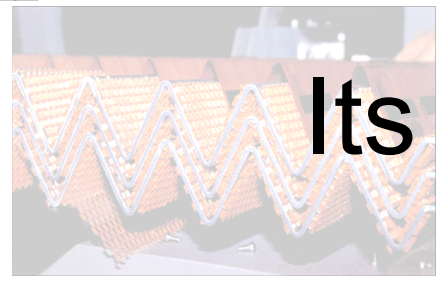
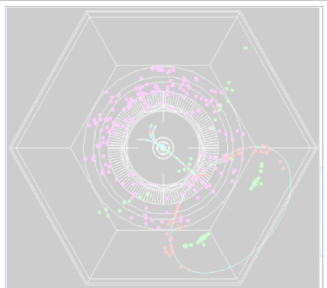
Best student presentation

Best student questions

Best lecture



# Enjoy the school !



# Its success relies on you

