

# IZEST Fall Meeting - Ultra high Intensity : New Horizons



**I ZEST**

**International** Zeta-Exawatt  
Science Technology

**Thursday, 30 November 2017 - Friday, 1 December 2017**

## **Scientific Programme**

**\*PRELIMINARY Program\***

**Thursday November 30, 2017**

09:30 Welcome – Registration  
 09:45 Welcome by Michel Guidal, Director of IPNO  
 09:50 G. Mourou (IZEST) & T. Tajima (UCI) - Introduction

**Session 1 : High Peak Power – From PW to 100PW** (Chair Gerard Mourou)  
 10:00 C. H. Nam (GIST-CoReLS) - Commissioning the 20 fs, 4 PW Laser at CoReLS  
 10:30 R. Li / Y. Peng (SIOM) – 100 PW  
 11:00 B. Le Garrec (LULI) - Apollon Update

11:30 *COFFE BREAK*

**Session 2 : High Energy Pulse compression in the atto-zepto time scale** (Chair Ales Nicas)  
 11:50 K. Tanaka (ELI-NP) / J. Wheeler (IZEST) - Generation and Application of Atto-Zepto High energy Pulse  
 12:20 S. K. Lee (IBS-GIST) - High Energy Compression at CoReLS

12:50 *LUNCH*

**Session 3 : Fundamental Science and Applications** (ChairToshiki Tajima)  
 14:30 L. Gizzi (INO-CNR) - EuPRAXIA : A Viable Laser Driver for Plasma Acceleration  
 15:00 D. Stutman (ELI-NP) - New medical research directions with High Power Lasers at ELI-NP

15:30 *COFFEE BREAK*

15:50 H. Pepin (INRS-EMT) - Pulsed high-brightness neutrons delivered by multi-PW lasers for neutron interactions investigations  
 16:20 I. Pomerantz (Tel Aviv U.) - Neutron generation  
 16:50 X. Yan / H. Lu (PKU) - 3 atto-second pulse generation by single cycle laser pulse

17:20 adjourn

**Friday December 1, 2017**

**Session 4 : XCAN and Applications** (Chair Jean-Christophe Chanteloup)  
 09:00 J.C. Chanteloup (LULI) - X CAN  
 09:30 A.Cucoanes (ELI-NP) - Transmutation studies at ELI-NP  
 10:00 S. Gales (IPNO - IZEST) – Transmutation Overview  
 10:30 S. David (IN2P3)- Nuclear Waste Transmutation 2

11:00 *COFFEE BREAK*

11:20 C. Bonnal (CNES) – Space debris overview

11:50 G. Mourou (IZEST) – Space debris precision positioning

**Session 5 : Economical impact of research infrastructures**

12:20 F. Brottier (Euroopportunities) - ELI Socio economic Impact

12:35 *LUNCH*

13:30 3 workshops are organized in parallel :

1/ Transmutation – Chaired by T. Tajima (UCI) / A. Necas (UCI)

2/ Space debris – Chaired by C. Bonnal (CNES)

3/ Pulse compression – Chaired by J. Wheeler (IZEST)