



ECT*



EUROPEAN CENTRE FOR THEORETICAL STUDIES
IN NUCLEAR PHYSICS AND RELATED AREAS
TRENTO, ITALY

Institutional Member of the ESF Expert Committee NuPECC



Castello di Trento ("Trint"). watercolour, 19.8 x 27.7, painted by A. Dürer on his way back from Venice (1495)

British Museum, London.

Physics at a Fixed Target Experiment using the LHC beams

Trento, February 4-13, 2013

Main Topics

This is an exploratory workshop which aims at studying in detail the opportunity and feasibility of a fixed-target experiment using the LHC beams extracted by a bent crystal. Complementarity with existing experiments at the LHC, at SPS, at CEBAF, at Fermilab and at RHIC will also be the cornerstone of the discussions. The contribution of everyone is therefore welcome.

The workshop will consist of morning sessions with invited speakers and afternoon sessions devoted to work in groups on the following themes:

Nucleon and nucleus PDF extraction in hadronic processes

Spin physics

Quark-Gluon Plasma physics

Nuclear-matter studies in proton-nucleus collisions

Diffractive physics and ultra-peripheral collisions

Heavy-quark dynamics and spectroscopy at high $|t_{\text{F}}|$

Beam extraction and secondary beams

Studies of the crystal-extraction influence on the machine and detector performance

Target polarisation

Modern detection technologies

Event generator and detector simulation



AFTER @ LHC



MI

Mission Interdisciplinarité



For more information, please check <https://indico.in2p3.fr/event/AFTER@ECTstar>

Key speakers include

M. Anselmino (*Università di Torino and INFN, Italy*); R. Arnaldi (*INFN Torino, Italy*); V. Chamberl (*IPN Orsay, France*); D. D'Enterria (*CERN, Genève, Switzerland*); O. Denisov (*INFN Torino, Italy*); J.-P. Didelez (*IPN Orsay, France*); J. Engelfried (*Universidad Autónoma de San Luis Potosí, Mexico*); V. Kartvelishvili (*Lancaster, U.K.*); C. Lorce (*IPN Orsay, France*); J.-C. Peng (*University of Illinois, Urbana, USA*); S. Platchkov (*IRFU/SPhN, CEA Saclay, France*); S. Porteboeuf (*LPC Clermont-Ferrand, France*); B. Saghai (*IRFU/SPhN, CEA Saclay, France*); H. Satz (*Bielefeld U., Germany*); S. Sawada (*KEK, Tsukuba, Japan*); G. Schnell (*University of the Basque Country UPV/EHU, Bilbao, Spain*); E. Scomparin (*INFN Torino, Italy*); J. Seixas (*CERN, Genève, Switzerland*); T. Stavreva (*LPSC, Grenoble, France*); L. Szymanowski (*NCRN, Warsaw, Poland*); N. Topilskaya (*INR-RAS, Moscow, Russia*); R. Vogt (*LLNL & UC DAVIS, Livermore/Davis, USA*)

Organizers

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Director of the ECT*: Professor Wolfram Weise (ECT*)

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