

# Vienna Central European Seminar 2016

Thursday 01 December 2016 - Friday 02 December 2016

Natural History Museum



12<sup>th</sup> VIENNA CENTRAL EUROPEAN SEMINAR  
ON PARTICLE PHYSICS AND QUANTUM FIELD THEORY

PHYSICS AT LHC - RUN 2

Dec 01-02, 2016

## Book of Abstracts



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## Public Lecture

THU1 / 2

### Higgs Experimental Overview

**Corresponding Author:** tamara.vazquez.schroeder@cern.ch

35 talk + 5 discussion

THU1 / 3

### Higgs precision calculations at the LHC

**Corresponding Author:** kirill.melnikov@kit.edu

20 talk + 5 discussion

THU1 / 4

### Energizing Higgs phenomenology at the LHC

**Corresponding Author:** michael.spannowsky@googlemail.com

20 talk + 5 discussion

THU2 / 5

### Standard Model Experimental Overview

**Corresponding Author:** paul.james.laycock@cern.ch

35 talk + 5 discussion

THU2 / 6

### Top quark physics at the LHC

**Corresponding Author:** sven-olaf.moch@desy.de

20 talk + 5 discussion

THU2 / 7

## **Top mass calibration for Monte Carlo generators**

**Corresponding Author:** moritz.preisser@univie.ac.at

20 talk + 5 discussion

THU3 / 8

## **Standard Model Theory for the LHC**

**Corresponding Author:** thomas.gehrmann@uzh.ch

40 talk + 5 discussion

THU3 / 9

## **Physics at Future Colliders**

**Corresponding Author:** jenny.list@cern.ch

40 talk + 5 discussion

THU4 / 10

## **Dark Matter Theory Overview**

**Corresponding Author:** celine.boehm1@gmail.com

35 talk + 5 discussion

THU4 / 11

## **Dark Matter direct detection: experimental overview (CANCELED)**

**Corresponding Author:** holger.kluck@oeaw.ac.at

20 talk + 5 discussion

FRI3 / 12

## **Flavor Theory overview**

**Corresponding Author:** david.straub@tum.de

30 talk + 5 discussion

**FRI3 / 13**

## **Flavor Experimental Overview (LHCb)**

**Corresponding Author:** nicola.neri@cern.ch

30 talk + 5 discussion

**FRI3 / 14**

## **Status of Lattice Calculations**

**Corresponding Author:** cts@soton.ac.uk

20 talk + 5 discussion

**FRI4 / 15**

## **Heavy Ion Theory Overview**

40 talk + 5 discussion

**FRI4 / 16**

## **Heavy Ion Experimental Overview**

**Corresponding Author:** m.weber@cern.ch

40 talk + 5 discussion

**FRI1 / 17**

## **BSM / Exotica (non-SUSY) experimental overview**

**Corresponding Author:** ivan.mikulec@cern.ch

40 talk + 5 discussion

**FRI2 / 18**

## **Searches for Supersymmetry with CMS and ATLAS Detectors at the LHC**

**Corresponding Author:** altan.cakir@cern.ch

35 talk + 5 discussion

**FRI1 / 19**

## **BSM Theory Overview**

**Corresponding Author:** alex.pomarol@cern.ch

40 talk + 5 discussion

**FRI2 / 20**

## **BSM Theory Overview**

**Corresponding Author:** jernej.kamenik@ijs.si

20 talk + 5 discussion

**FRI2 / 21**

## **Status of SUSY**

**Corresponding Author:** porod@physik.uni-wuerzburg.de

20 talk + 5 discussion

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## **Public Lecture: Cosmic ripples from black holes and the big bang**

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## **Planetarium show (limited attendance)**

“The Phantom of the Universe - the Hunt for Dark Matter”

**Poster Session (lunch provided) / 27**

## **Constraining the pMSSM with SModelS**

**Corresponding Author:** federico.ambrogi@cern.ch

**Poster Session (lunch provided) / 28**

## **From threshold to continuum: Off-shell top pair production at a lepton collider**

**Corresponding Author:** bijan.chokoufe@gmail.com

**Poster Session (lunch provided) / 29**

## **Four tops for LHC**

**Corresponding Author:** darius.faroughy@ijs.si

**Poster Session (lunch provided) / 30**

## **Neutral Meson Oscillations in Baryonic Matter**

**Corresponding Author:** peter.filip@cern.ch

**Poster Session (lunch provided) / 31**

## **Neutrino masses from a matrix analysis point of view**

**Corresponding Author:** woj.flieger@gmail.com

**Poster Session (lunch provided) / 32**

## **The Grimus-Neufeld model with today's measurements**

**Corresponding Author:** thomas.gajdosik@cern.ch

**Poster Session (lunch provided) / 33**

## **The limits on the strong Higgs sector parameters in the presence of new vector resonances**

**Corresponding Author:** gintner@fyzika.uniza.sk

**Poster Session (lunch provided) / 34**

## **Three jet production with the CoLoRFulNNLO method**

**Corresponding Author:** kardos.adam@science.unideb.hu

**Poster Session (lunch provided) / 35**

## **Proton lifetime in the minimal SO(10) GUT and its implications for the LHC**

**Corresponding Author:** helena.kolesova@fjfi.cvut.cz

**Poster Session (lunch provided) / 36**

## **Noncommutative Geometry and the Higgs phenomenon**

**Poster Session (lunch provided) / 37**

## **One-loop spectrum of the minimal calculable unified model**

**Corresponding Author:** timon.mede@gmail.com

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## **Search for top squark pair-production in the single-lepton channel in models with highly compressed mass spectra with the CMS experiment**

Corresponding Author: [navid.rad@cern.ch](mailto:navid.rad@cern.ch)

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## **Dissipative Losses in Self-Interacting Dark Matter Collisions**

Poster Session (lunch provided) / 40

## **H->tau tau measurements with CMS**

Corresponding Author: [markus.spanring@cern.ch](mailto:markus.spanring@cern.ch)

Poster Session (lunch provided) / 41

## **Search for supersymmetry in pp collisions at 13 TeV in the single lepton final state with the CMS experiment**

Corresponding Author: [daniel.spitzbart@cern.ch](mailto:daniel.spitzbart@cern.ch)

Poster Session (lunch provided) / 42

## **Exploring Non-Local Observables in Shock Wave Collisions**

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## **Three jet rate in electron-positron annihilation**

**Poster Session (lunch provided) / 45**

## **N-jettiness at NNLO accuracy in electron-positron annihilation**

**Corresponding Author:** tulzoltan@gmail.com

**Poster Session (lunch provided) / 46**

## **Studies of correlations between measurements of jet observables**

**Corresponding Author:** andrii.verbytskyi@cern.ch

**Poster Session (lunch provided) / 48**

## **Combined analysis of charm-quark fragmentation-fraction measurements**

**Corresponding Author:** oleksandr.zenaiev@cern.ch