

Lake Louise Winter Institute 2023



Report of Contributions

Contribution ID: **363**

Type: **not specified**

Welcome

Monday 20 February 2023 08:25 (5 minutes)

Session Classification: Monday

Contribution ID: **364**

Type: **not specified**

Status of the LHC collider program (ATLAS/CMS)

Monday 20 February 2023 08:30 (1 hour)

Summary

Presenter: JESSOP, Colin (University of Notre Dame (US))

Session Classification: Monday

Contribution ID: 365

Type: **not specified**

Dark matter: from cosmological simulations to particle detection

Monday 20 February 2023 18:20 (1 hour)

Presenter: BOZORGNIA, Nassim (York University, University of Alberta)

Session Classification: Monday

Contribution ID: **366**

Type: **not specified**

Muon Anomaly and Lattice QCD

Tuesday 21 February 2023 20:45 (1 hour)

Presenter: FODOR, Zoltan (BUW)

Session Classification: Tuesday

Contribution ID: **367**

Type: **not specified**

Neutrino Physics Review

Wednesday 22 February 2023 08:30 (1 hour)

Presenter: CHEN, Mu-Chun (University of California - Irvine)

Session Classification: Wednesday

Contribution ID: **368**

Type: **not specified**

Theory adventures with W-mass

Friday 24 February 2023 18:15 (1 hour)

Presenter: LIU, Zhen

Session Classification: Friday

Contribution ID: **369**

Type: **not specified**

Flavor Physics Review

Friday 24 February 2023 08:45 (1 hour)

Presenter: BROD, Joachim (University of Cincinnati)

Session Classification: Friday

Contribution ID: 370

Type: **not specified**

Present and Future of Muon Experiments

Thursday 23 February 2023 18:00 (1 hour)

Presenter: Dr KANDA, Sohtaro (KEK)

Session Classification: Thursday

Contribution ID: 371

Type: **not specified**

Probing the nature of electroweak symmetry breaking with Higgs boson pairs in ATLAS

Monday 20 February 2023 10:15 (15 minutes)

Presenter: RUIZ MARTINEZ, Arantxa (Univ. of Valencia and CSIC (ES))

Session Classification: Monday

Contribution ID: 372

Type: **not specified**

Searching for additional Higgs bosons at ATLAS (and BSM decays of Higgs)

Monday 20 February 2023 10:00 (15 minutes)

Summary

Presenter: SIDOTI, Antonio (Universita e INFN, Bologna (IT))

Session Classification: Monday

Contribution ID: 373

Type: **not specified**

The newest Higgs results at CMS

Monday 20 February 2023 09:30 (15 minutes)

Presenter: SAFONOV, Alexei (Texas A & M University (US))

Session Classification: Monday

Contribution ID: 374

Type: **not specified**

Recent highlights of top-quark cross section and properties measurements with the ATLAS detector at the LHC

Monday 20 February 2023 10:45 (15 minutes)

Presenter: FENTON, Michael James (University of California Irvine (US))

Session Classification: Monday

Contribution ID: 375

Type: **not specified**

Recent results on associated top quark production and searches for new top-quark phenomena with the ATLAS detector

Monday 20 February 2023 11:00 (15 minutes)

Presenter: ZOCH, Knut (Universite de Geneve (CH))

Session Classification: Monday

Contribution ID: 376

Type: **not specified**

Measurements of vector boson production in association with jets with the ATLAS detector

Monday 20 February 2023 11:30 (15 minutes)

Presenter: RUSSELL, Heather (University of Victoria)

Session Classification: Monday

Contribution ID: 377

Type: **not specified**

QCD Standard Model measurements with the ATLAS Detector

Monday 20 February 2023 11:45 (15 minutes)

Presenter: FEICKERT, Matthew (University of Wisconsin Madison (US))

Session Classification: Monday

Contribution ID: 378

Type: **not specified**

Searches for resonances decaying to pairs of heavy bosons in ATLAS

Thursday 23 February 2023 09:15 (15 minutes)

Presenter: BELLOS, Panagiotis (University of Birmingham (GB))

Session Classification: Thursday

Contribution ID: **381**

Type: **not specified**

CYGNUS

Monday 20 February 2023 19:45 (15 minutes)

Presenter: GHREAR, Majd

Session Classification: Monday

Contribution ID: **382**

Type: **not specified**

DELight

Tuesday 21 February 2023 10:35 (15 minutes)

Presenter: TOSCHI, Francesco

Session Classification: Tuesday

Contribution ID: 383

Type: **not specified**

Flavour Tagging with Graph Neural Network with the ATLAS Detector

Monday 20 February 2023 17:00 (15 minutes)

Presenter: KHANOV, Alexander (Oklahoma State University (US))

Session Classification: Monday

Contribution ID: **384**

Type: **not specified**

Improving ATLAS Hadronic Object Performance with ML/AI Algorithms

Monday 20 February 2023 17:15 (15 minutes)

Presenter: FITSCHEN, Tobias (University of Manchester (GB))

Session Classification: Monday

Contribution ID: 386

Type: **not specified**

Precision Timing at the High Energy Frontier with the CMS MIP Timing Detector

Monday 20 February 2023 17:45 (15 minutes)

Presenter: SIVIERO, Federico (Universita e INFN Torino (IT))

Session Classification: Monday

Contribution ID: **387**

Type: **not specified**

Measurements of Higgs boson properties with the ATLAS detector

Monday 20 February 2023 09:45 (15 minutes)

Presenter: SAOUCHA, Kamal (University of Sheffield (GB))

Session Classification: Monday

Contribution ID: **388**

Type: **not specified**

Performing precision measurements and new physics searches at the HL-LHC with the upgraded CMS Level-1 Trigger

Thursday 23 February 2023 10:25 (15 minutes)

Presenter: LANGFORD, Jonathon Mark (Imperial College (GB))

Session Classification: Thursday

Contribution ID: **389**

Type: **not specified**

Improved track reconstruction for prompt and long-lived particles in ATLAS for the LHC Run 3

Monday 20 February 2023 17:30 (15 minutes)

Presenter: KRIZKA, Karol (University of Birmingham (GB))

Session Classification: Monday

Contribution ID: 390

Type: **not specified**

Latest updates and results from the DEAP-3600 experiment

Tuesday 21 February 2023 08:30 (15 minutes)

Presenter: KEMP, Ashlea Amanda (Royal Holloway, University of London)

Session Classification: Tuesday

Contribution ID: **391**

Type: **not specified**

LZ

Tuesday 21 February 2023 09:45 (30 minutes)

Presenter: FAN, Alden (SLAC/Stanford)

Session Classification: Tuesday

Contribution ID: 392

Type: **not specified**

NEWS-G

Tuesday 21 February 2023 09:00 (15 minutes)

Presenter: COQUILLAT, Jean-Marie

Session Classification: Tuesday

Contribution ID: **393**

Type: **not specified**

DAMIC

Monday 20 February 2023 19:20 (25 minutes)

Presenter: CHAVARRIA, Alvaro (University of Washington)

Session Classification: Monday

Contribution ID: 394

Type: **not specified**

DarkSide20

Tuesday 21 February 2023 08:45 (15 minutes)

Presenter: SANDFORD, Ellen (The University of Manchester)

Session Classification: Tuesday

Contribution ID: 395

Type: **not specified**

KDK

Tuesday 21 February 2023 09:15 (15 minutes)

Presenter: HARIASZ, Lilianna

Session Classification: Tuesday

Contribution ID: **396**

Type: **not specified**

SuperCDMS

Tuesday 21 February 2023 09:30 (15 minutes)

Presenter: PRADEEP, Aadi

Session Classification: Tuesday

Contribution ID: 397

Type: **not specified**

Recent results on Dark Sector and tau lepton physics at Belle II

Tuesday 21 February 2023 10:50 (15 minutes)

Presenter: DREYER, Sascha Simon

Session Classification: Tuesday

Contribution ID: 398

Type: **not specified**

Dark Sector Physics at Babar

Tuesday 21 February 2023 11:05 (15 minutes)

Presenter: ROBERTSON, Steven (IPP / University of Alberta)

Session Classification: Tuesday

Contribution ID: **399**

Type: **not specified**

ALICE

Thursday 23 February 2023 10:55 (30 minutes)

Presenter: BOSSI, Hannah (Yale University (US))

Session Classification: Thursday

Contribution ID: **400**

Type: **not specified**

DarkLight

Tuesday 21 February 2023 11:20 (15 minutes)

Presenter: PACHAL, Katherine

Session Classification: Tuesday

Contribution ID: **403**

Type: **not specified**

FASER/FASERnu

Tuesday 21 February 2023 11:35 (25 minutes)

Presenter: HSU, Shih-Chieh (University of Washington Seattle (US))

Session Classification: Tuesday

Contribution ID: **404**

Type: **not specified**

NEXO

Wednesday 22 February 2023 10:15 (15 minutes)

Presenter: AL KHARUSI, Soud

Session Classification: Wednesday

Contribution ID: **405**

Type: **not specified**

AMoRE

Wednesday 22 February 2023 11:15 (15 minutes)

Presenter: KIM, Hanbeom

Session Classification: Wednesday

Contribution ID: **406**

Type: **not specified**

BeEST

Wednesday 22 February 2023 11:45 (15 minutes)

Presenter: LENNARZ, Annika (TRIUMF)

Session Classification: Wednesday

Contribution ID: **407**

Type: **not specified**

CONUS

Wednesday 22 February 2023 11:30 (15 minutes)

Presenter: ACKERMANN, Nicola

Session Classification: Wednesday

Contribution ID: **408**

Type: **not specified**

CUORE

Wednesday 22 February 2023 10:00 (15 minutes)

Presenter: MAYER, Daniel

Session Classification: Wednesday

Contribution ID: **409**

Type: **not specified**

CUPID

Wednesday 22 February 2023 10:45 (15 minutes)

Presenter: ALFONSO, Krystal

Session Classification: Wednesday

Contribution ID: **410**

Type: **not specified**

HyperK

Wednesday 22 February 2023 18:00 (15 minutes)

Presenter: KING, Sophie Emma (University of London (GB))

Session Classification: Wednesday

Contribution ID: 411

Type: **not specified**

HyperK IWCD

Wednesday 22 February 2023 18:30 (15 minutes)

Summary

Presenter: TIWARI, Deepak (Hyper-K, University of Regina & TRIUMF)

Session Classification: Wednesday

Contribution ID: **412**

Type: **not specified**

Katrin

Wednesday 22 February 2023 09:30 (15 minutes)

Presenter: LEHNERT, Bjoern (Berkeley Lab)

Session Classification: Wednesday

Contribution ID: 413

Type: **not specified**

IceCube astro+Gen2

Wednesday 22 February 2023 19:15 (15 minutes)

Presenter: LIU, Qinrui (Queen's University)

Session Classification: Wednesday

Contribution ID: 414

Type: **not specified**

IceCube low-energy + upgrade

Wednesday 22 February 2023 17:15 (15 minutes)

Presenter: MICALLEF, Jessie (Tufts University (and MIT))

Session Classification: Wednesday

Contribution ID: 415

Type: **not specified**

JUNO

Wednesday 22 February 2023 17:45 (15 minutes)

Presenter: JELMINI, Beatrice (Università degli Studi di Padova & INFN Padova)

Session Classification: Wednesday

Contribution ID: **416**

Type: **not specified**

KM3NeT-ORCA

Wednesday 22 February 2023 19:30 (15 minutes)

Summary

Presenter: JUNG, Bouke

Session Classification: Wednesday

Contribution ID: **417**

Type: **not specified**

LEGEND

Wednesday 22 February 2023 11:00 (15 minutes)

Presenter: SCHAPER, Danielle

Session Classification: Wednesday

Contribution ID: **418**

Type: **not specified**

MicroBoone

Wednesday 22 February 2023 17:30 (15 minutes)

Presenter: JO, Jay Hyun (Brookhaven National Laboratory)

Session Classification: Wednesday

Contribution ID: **419**

Type: **not specified**

MINERvA Cross Section Results: CH

Wednesday 22 February 2023 18:45 (15 minutes)

Summary

Presenter: CAI, Tejin

Session Classification: Wednesday

Contribution ID: **420**

Type: **not specified**

NOvA

Wednesday 22 February 2023 17:00 (15 minutes)

Presenter: BOOTH, Alexander (University of Sussex)

Session Classification: Wednesday

Contribution ID: 421

Type: **not specified**

Project 8

Wednesday 22 February 2023 09:45 (15 minutes)

Summary

Presenter: TELLES, Arina (Yale University)

Session Classification: Wednesday

Contribution ID: 422

Type: **not specified**

MINERvA Cross Section Results: Nuclear Targets

Wednesday 22 February 2023 19:00 (15 minutes)

Summary

Presenter: LAST, David Robert (University of Pennsylvania (US))

Session Classification: Wednesday

Contribution ID: 423

Type: **not specified**

Searches for BSM physics using challenging and long-lived signatures with the ATLAS detector

Thursday 23 February 2023 09:30 (15 minutes)

Presenter: PAGAN GRISO, Simone (Lawrence Berkeley National Lab. (US))

Session Classification: Thursday

Contribution ID: 424

Type: **not specified**

Searches for leptoquarks with the ATLAS detector

Thursday 23 February 2023 09:00 (15 minutes)

Presenter: LENZ, Tatjana (University of Bonn (DE))

Session Classification: Thursday

Contribution ID: 425

Type: **not specified**

Searches for supersymmetric particles with prompt decays with the ATLAS detector

Thursday 23 February 2023 08:45 (15 minutes)

Presenter: CERVELLI, Alberto (Universita e INFN, Bologna (IT))

Session Classification: Thursday

Contribution ID: 426

Type: **not specified**

Probing EFT models using $t(t)X$ in multiple lepton final states

Thursday 23 February 2023 09:45 (15 minutes)

Presenter: WIGHTMAN, Andrew (University of Nebraska Lincoln (US))

Session Classification: Thursday

Contribution ID: 427

Type: **not specified**

Search for CP violation in the tau Yukawa coupling with CMS

Monday 20 February 2023 11:15 (15 minutes)

Presenter: SESSINI, Mario (Centre National de la Recherche Scientifique (FR))

Session Classification: Monday

Contribution ID: **428**

Type: **not specified**

NA62

Thursday 23 February 2023 10:40 (15 minutes)

Presenter: MARCHEVSKI, Radoslav (CERN)

Session Classification: Thursday

Contribution ID: 429

Type: **not specified**

Measurement of the tau lepton polarization in Z boson decays by CMS

Friday 24 February 2023 10:15 (15 minutes)

Presenter: GOERLACH, Ulrich (Centre National de la Recherche Scientifique (FR))

Session Classification: Friday

Contribution ID: **430**

Type: **not specified**

Muon g-2

Thursday 23 February 2023 19:00 (15 minutes)

Summary

Primary author: Ms VASILKOVA, Dominika (University College London)

Presenters: Ms VASILKOVA, Dominika (University College London); VASILKOVA, Dominika (Imperial College (GB))

Session Classification: Thursday

Contribution ID: **431**

Type: **not specified**

mu2e

Thursday 23 February 2023 19:15 (15 minutes)

Presenter: HEDGES, Michael (Purdue University)

Session Classification: Thursday

Contribution ID: 432

Type: **not specified**

Lepton Flavour Universality tests with $b \rightarrow s\ell^+\ell^-$ decays at LHCb

Friday 24 February 2023 09:45 (15 minutes)

Presenter: VOLLE, Felicia Carolin (Université Paris-Saclay (FR))

Session Classification: Friday

Contribution ID: 434

Type: **not specified**

SND

Thursday 23 February 2023 08:30 (15 minutes)

Presenter: FERRILLO, Martina (University of Zurich (CH))

Session Classification: Thursday

Contribution ID: 435

Type: **not specified**

Recent results from light hadron spectroscopy at BESIII

Friday 24 February 2023 17:30 (15 minutes)

Presenter: GARZIA, Isabella

Session Classification: Friday

Contribution ID: 436

Type: **not specified**

XYZ particles at BESIII

Friday 24 February 2023 17:45 (15 minutes)

Presenter: JACKSON, Joshua (zTest - Indiana University)

Session Classification: Friday

Contribution ID: 437

Type: **not specified**

Latest results on charmonium decays at BESIII

Friday 24 February 2023 18:00 (15 minutes)

Presenter: SCODEGGIO, Marco (Universita e INFN, Ferrara (IT))

Session Classification: Friday

Contribution ID: 438

Type: **not specified**

Commissioning and Early Data from the LHCb Upgrade

Friday 24 February 2023 10:00 (15 minutes)

Summary

Presenter: AMALRIC, Renaud (LPNHE (Paris,FR), Centre National de la Recherche Scientifique (FR))

Session Classification: Friday

Contribution ID: 439

Type: **not specified**

Rare B decays with leptons at Belle

Friday 24 February 2023 10:50 (15 minutes)

Summary

Presenter: FERLEWICZ, Daniel (The University of Melbourne)

Session Classification: Friday

Contribution ID: 440

Type: **not specified**

Recent results on semileptonic, radiative, and electroweak penguin decays at Belle II

Friday 24 February 2023 11:05 (15 minutes)

Presenter: GRANDERATH, Svenja

Session Classification: Friday

Contribution ID: 441

Type: **not specified**

Recent results on hadronic decays and CP violation at Belle II

Friday 24 February 2023 11:20 (15 minutes)

Presenter: OKUBO, Ryogo (Nagoya University)

Session Classification: Friday

Contribution ID: 442

Type: **not specified**

Hadronic Cross Section Measurements using Initial State Radiation

Friday 24 February 2023 11:35 (15 minutes)

Presenter: VASSEUR, Georges

Session Classification: Friday

Contribution ID: 445

Type: **not specified**

PHENIX

Thursday 23 February 2023 11:25 (15 minutes)

Presenter: TAKAHAMA, Runa

Session Classification: Thursday