

# **Workshop on Standard Model and Beyond**

## **Report of Contributions**

Contribution ID: 270

Type: **not specified**

## Remembering Graham Ross

*Thursday 1 September 2022 09:00 (5 minutes)*

Graham Ross memorial

**Presenter:** ZOUPANOS, George

Contribution ID: 271

Type: **not specified**

## Alan Martin and Graham Ross

*Thursday 1 September 2022 09:05 (40 minutes)*

**Presenter:** MARTIN, Alan

Contribution ID: 272

Type: **not specified**

## **The RG, LOOPS and GGR**

*Thursday 1 September 2022 12:00 (30 minutes)*

**Presenter:** JONES, Tim (University of Liverpool)

Contribution ID: 273

Type: **not specified**

## **SM in Weyl conformal geometry**

*Thursday 1 September 2022 13:00 (30 minutes)*

**Presenter:** GHILENCEA, Dumitru (Horia Hulubei National Institute of Physics and Nuclear Engineering (RO))

Contribution ID: 274

Type: **not specified**

## Remembering Graham Ross

*Thursday 1 September 2022 10:15 (15 minutes)*

**Presenter:** LOLA, Magda

Contribution ID: 275

Type: **not specified**

## **A challenge to the cosmological standard model**

*Thursday 1 September 2022 09:45 (30 minutes)*

**Presenter:** SARKAR, Subir (University of Oxford)

Contribution ID: 276

Type: **not specified**

## Recent results from CMS

*Monday 29 August 2022 16:00 (1 hour)*

**Presenter:** TKACZYK, Slawomir Marek (Fermi National Accelerator Lab. (US))



Contribution ID: 277

Type: **not specified**

## Physics highlights from LHCb

*Wednesday 31 August 2022 09:00 (1 hour)*

**Presenter:** HARNEW, Neville (University of Oxford (GB))

Contribution ID: 278

Type: **not specified**

## Recent results from ATLAS

*Monday 29 August 2022 09:30 (1 hour)*

**Presenter:** CRISTINZIANI, Markus (Universität Siegen)

Contribution ID: 280

Type: **not specified**

## **Gluon Fusion Production at NLO: Merging the Transverse Momentum and the High-Energy Expansions**

**Presenter:** BELLAFRONTI, Luigi

Contribution ID: 281

Type: **not specified**

## **Gravitational contact terms ... or ... does the Jordan frame really exist?**

*Thursday 1 September 2022 17:30 (30 minutes)*

**Presenter:** HILL, Christopher (University of Bristol)

Contribution ID: 282

Type: **not specified**

## Remembering Graham Ross

*Thursday 1 September 2022 11:45 (15 minutes)*

**Presenter:** POKORSKI, Stefan (University of Warsaw (PL))

Contribution ID: 283

Type: **not specified**

## **Scale invariant SM and inhomogeneous universe**

*Thursday 1 September 2022 16:30 (30 minutes)*

**Presenter:** LALAK, Zygmunt (Faculty of Physics)

Contribution ID: **284**

Type: **not specified**

## **Unified theories of flavour**

*Thursday 1 September 2022 10:30 (30 minutes)*

**Presenter:** KING, Steve

Contribution ID: 286

Type: **not specified**

## Diagram of high-energy nuclear collisions

*Monday 5 September 2022 18:20 (30 minutes)*

**Presenter:** GAZDZICKI, Marek (Jan Kochanowski University (PL))



Contribution ID: **287**

Type: **not specified**

## **HL-LHC project**

*Monday 5 September 2022 16:00 (1 hour)*

**Presenter:** ZERLAUTH, Markus (CERN)

Contribution ID: 288

Type: **not specified**

## **New developments for neutrino mixing in quantum field theory**

*Friday 2 September 2022 11:15 (15 minutes)*

**Presenter:** SMALDONE, Luca (University of Warsaw)

Contribution ID: 289

Type: **not specified**

## **Complete complementarity relations for quantum correlations in neutrino oscillations**

*Wednesday 31 August 2022 17:30 (30 minutes)*

**Presenter:** BLASONE, Massimo (Università di Salerno & INFN)

Contribution ID: 290

Type: **not specified**

## High-precision measurement of the W boson mass with the CDF II detector

*Wednesday 31 August 2022 16:00 (30 minutes)*

**Presenter:** KOTWAL, Ashutosh (Duke University)

Contribution ID: 291

Type: **not specified**

## Remembering Graham Ross

*Thursday 1 September 2022 11:30 (15 minutes)*

**Presenter:** RABY, Stuart (The Ohio State University)

Contribution ID: 292

Type: **not specified**

## **Family symmetries and the origin of fermion masses and mixings**

*Thursday 1 September 2022 18:35 (30 minutes)*

**Presenter:** DE MEDEIROS VARZIELAS, Ivo

Contribution ID: 293

Type: **not specified**

## **Finite unified theories and their predictions**

*Thursday 1 September 2022 12:30 (30 minutes)*

**Presenter:** MONDRAGON, Myriam (Universidad Nacional Autonoma de Mexico UNAM)

Contribution ID: 294

Type: **not specified**

## **Parton distribution functions for discovery physics at the LHC**

*Thursday 1 September 2022 17:00 (30 minutes)*

**Presenter:** COOPER-SARKAR, Amanda (University of Oxford (GB))



Contribution ID: 295

Type: **not specified**

## Seeking de Sitter vacua in the string landscape

*Thursday 1 September 2022 16:00 (30 minutes)*

**Presenter:** LEONTARIS, George (University of Ioannina (GR))

Contribution ID: 297

Type: **not specified**

## **BEH boson(s) searches between 1964 and 2012**

*Monday 29 August 2022 09:00 (30 minutes)*

**Presenter:** FAYARD, Louis (Université Paris-Saclay (FR))

Contribution ID: 298

Type: **not specified**

## **Planck formula for the gluon parton distribution in the proton**

*Monday 29 August 2022 11:30 (30 minutes)*

**Presenter:** BUCCELLA, Franco (Unknown)

Contribution ID: 299

Type: **not specified**

## **Searches for Supersymmetry with the ATLAS and CMS detectors**

*Saturday 3 September 2022 11:30 (30 minutes)*

**Presenter:** MITSOU, Vasiliki (Univ. of Valencia and CSIC (ES))

Contribution ID: **300**

Type: **not specified**

## **The MoEDAL-MAPP experiment - expanding the LHC's discovery horizon at Run-3 and beyond**

*Sunday 28 August 2022 17:00 (30 minutes)*

**Presenter:** PINFOLD, James (University of Alberta (CA))

Contribution ID: **301**

Type: **not specified**

## **Testing Bell inequalities in $H \rightarrow \tau, \tau$ process at the ILC**

*Monday 29 August 2022 18:20 (30 minutes)*

**Presenter:** SAKURAI, Kazuki (University of Warsaw)

Contribution ID: **302**

Type: **not specified**

## **QCD Instantons at hadron colliders**

*Monday 29 August 2022 17:45 (15 minutes)*

**Presenter:** MILNE, Daniel Luke (Georg August Universitaet Goettingen (DE))

Contribution ID: **303**

Type: **not specified**

## **Gravitational Origin for Dark Matter**

*Saturday 3 September 2022 10:30 (30 minutes)*

**Presenter:** KOLB, Rocky (University of Chicago)



Contribution ID: **304**

Type: **not specified**

## **Eta and Glueballs**

*Monday 29 August 2022 12:00 (30 minutes)*

**Presenter:** FRERE, Jean-Marie (ULB)

Contribution ID: 305

Type: **not specified**

## **BSM physics in the higgs couplings and flavour symmetries**

*Saturday 3 September 2022 16:00 (30 minutes)*

**Presenter:** POKORSKI, Stefan (University of Warsaw (PL))

Contribution ID: 306

Type: **not specified**

## **UV/IR mixing, misaligned supersymmetry, and the running of couplings in string theory**

*Tuesday 6 September 2022 09:00 (30 minutes)*

**Presenter:** ABEL, Steven Adam (University of Durham (GB))

Contribution ID: **307**

Type: **not specified**

## **Precise calculation of the W boson pole mass beyond the Standard Model**

*Wednesday 31 August 2022 16:30 (30 minutes)*

**Presenter:** KOTLARSKI, Wojciech

Contribution ID: **308**

Type: **not specified**

## **Unconventional axions and ALPs**

*Tuesday 30 August 2022 17:00 (30 minutes)*

**Presenter:** GAVELA LEGAZPI, Belen (Universidad Autonoma de Madrid (ES))

Contribution ID: **309**

Type: **not specified**

## **Non-renormalizable interactions**

*Tuesday 30 August 2022 12:00 (30 minutes)*

**Presenter:** KAZAKOV, Dmitry (JINR)

Contribution ID: **310**

Type: **not specified**

## **Constraints on scalar-fermion theories**

*Tuesday 30 August 2022 12:30 (30 minutes)*

**Presenter:** JACK, Ian (Department of Physics (SHEP))

Contribution ID: **311**

Type: **not specified**

## **Probes of BSM physics using lattice QCD**

*Tuesday 30 August 2022 16:00 (30 minutes)*

**Presenter:** ALEXANDROU, Constantia



Contribution ID: 312

Type: **not specified**

## **The current status of epsilon\_K in lattice QCD**

*Tuesday 30 August 2022 16:30 (30 minutes)*

**Presenter:** LEE, Weonjong (Seoul National University)

Contribution ID: 313

Type: **not specified**

## **Progress in the Standard Model precision calculations**

*Monday 29 August 2022 17:00 (30 minutes)*

**Presenter:** GLUZA, Janusz (U. Silesia)

Contribution ID: 314

Type: **not specified**

## **Z-boson decay at the NNNLO level**

*Monday 29 August 2022 17:30 (15 minutes)*

**Presenter:** GRZANKA, Krzysztof Grzegorz (University of Silesia (PL))

Contribution ID: 315

Type: **not specified**

## Meson decays into invisible ALP

*Wednesday 31 August 2022 17:00 (30 minutes)*

**Presenter:** RIGOLIN, Stefano

Contribution ID: **316**

Type: **not specified**

## **Old and recent puzzles in flavor physics**

*Wednesday 31 August 2022 10:00 (30 minutes)*

**Presenter:** ISIDORI, Gino (University of Zurich (CH))

Contribution ID: **317**

Type: **not specified**

## **Leptogenesis and charged lepton flavour violation**

*Wednesday 31 August 2022 10:30 (30 minutes)*

**Presenter:** PILAFTSIS, Apostolos (University of Manchester (GB))

Contribution ID: **318**

Type: **not specified**

## **Do the small numbers in the quark mixing arise from New Physics?**

*Tuesday 30 August 2022 13:00 (30 minutes)*

**Presenter:** BRANCO, Gustavo (Instituto Superior Tecnico)

Contribution ID: **319**

Type: **not specified**

## **Kaonic atoms at the DAFNE Collider in Italy: strangeness from accelerators to the stars**

*Wednesday 31 August 2022 12:30 (30 minutes)*

**Presenter:** CURCEANU, Catalina (LNF-INFN)



Contribution ID: **320**

Type: **not specified**

## **Charm lifetimes**

*Wednesday 31 August 2022 13:00 (30 minutes)*

**Presenter:** MELIC, Blazenska (Rudjer Boskovic Institute)

Contribution ID: **321**

Type: **not specified**

# **Phenomenological implications of the modular symmetry**

*Wednesday 31 August 2022 18:35 (30 minutes)*

**Presenter:** YAMAMOTO, Kei

Contribution ID: 322

Type: **not specified**

## **Dark matter in S3-symmetric three-Higgs-doublet model**

*Tuesday 30 August 2022 18:20 (15 minutes)*

**Presenter:** KUNČINAS, Anton (CFTP/IST, U. Lisboa)

Contribution ID: **324**

Type: **not specified**

## **Review on neutrino physics: experiment**

*Friday 2 September 2022 09:00 (1 hour)*

**Presenter:** DE ROECK, Albert (CERN)

Contribution ID: 325

Type: **not specified**

## **Neutrino and Flavour Models, from the Planck Scale to the Electroweak Scale**

**Presenter:** KING, Stephen Frederick (University of Southampton (GB))

Contribution ID: 326

Type: **not specified**

## **UV sensitivity of dark matter production**

*Wednesday 31 August 2022 11:30 (30 minutes)*

**Presenter:** LEBEDEV, Oleg (University of Helsinki)

Contribution ID: 327

Type: **not specified**

## **Cosmic-ray anti-helium nuclei or the quest for antimatter in the Universe**

*Tuesday 30 August 2022 09:30 (30 minutes)*

**Presenter:** SALATI, Pierre (LAPTh & Université de Savoie Mont Blanc)

Contribution ID: 328

Type: **not specified**

## **Absolute neutrino mass scale and dark matter stability from a flavour symmetry**

**Presenter:** CEPEDELLO, Ricardo (University of Würzburg)



Contribution ID: 329

Type: **not specified**

## **A flavored scoto-seesaw model for neutrino masses and mixing**

**Presenter:** KARMAKAR, Biswajit

Contribution ID: 330

Type: **not specified**

## **Long-lived lightest supersymmetric particles at the LHC and MUON g-2 experiments**

*Saturday 3 September 2022 09:00 (30 minutes)*

**Presenter:** MUNOZ, Carlos (Universidad Autonoma de Madrid)

Contribution ID: **331**

Type: **not specified**

## **The geometric muSMEFT**

*Tuesday 30 August 2022 11:30 (30 minutes)*

**Presenter:** TALBERT, Jim

Contribution ID: 332

Type: **not specified**

## **Indirect dark-matter searches with gamma-rays experiments : status and future plans from 300 KeV to 100 TeV**

*Friday 2 September 2022 10:30 (30 minutes)*

**Presenter:** MORSELLI, Aldo (INFN)

Contribution ID: 333

Type: **not specified**

## **Dark Energy from a New Confining Force**

*Monday 5 September 2022 10:30 (30 minutes)*

**Presenter:** KIM, Jih E. (Kyung Hee University)

Contribution ID: 334

Type: **not specified**

## Higgs properties and supersymmetry

*Saturday 3 September 2022 12:00 (30 minutes)*

**Presenter:** MAHMOUDI, Nazila (Universite Claude Bernard Lyon I (FR))

Contribution ID: 335

Type: **not specified**

## **Subfrequency light signals of the dark sector**

*Saturday 3 September 2022 10:00 (30 minutes)*

**Presenter:** LEE, Hye-Sung (KAIST)

Contribution ID: 336

Type: **not specified**

## **Reconstructing heavy (anti-)neutrino oscillations at the HL-LHC**

**Presenter:** HAJER, Jan (Universidade de Lisboa)



Contribution ID: 337

Type: **not specified**

## **New physics in neutrino oscillations**

*Tuesday 6 September 2022 18:10 (30 minutes)*

**Presenter:** LOPEZ PAVON, Jacobo (IFIC, CSIC-Universitat de València)

Contribution ID: 338

Type: **not specified**

## Is there additional dark matter?

*Monday 5 September 2022 09:00 (30 minutes)*

**Presenter:** FRAMPTON, Paul (University of Salento)

Contribution ID: 339

Type: **not specified**

## **From flavour anomalies to future colliders**

*Monday 5 September 2022 09:30 (30 minutes)*

**Presenter:** MARZOCCA, David (INFN Trieste)

Contribution ID: 340

Type: **not specified**

## **Dimensional regularization and $\gamma_5$ —no-compromise approach to the BMHV scheme**

*Tuesday 6 September 2022 16:30 (30 minutes)*

**Presenter:** STOECKINGER, Dominik

Contribution ID: 341

Type: **not specified**

## **Muon magnetic moment in Physics beyond the Standard Model after Fermilab Run-1**

*Saturday 3 September 2022 16:30 (30 minutes)*

**Presenter:** STOECKINGER-KIM, Hyejung (TU Dresden)

Contribution ID: 342

Type: **not specified**

## **Gamma Factory – New physics opportunities for CERN**

*Monday 5 September 2022 17:00 (30 minutes)*

**Presenter:** KRASNY, Mieczyslaw Witold (LPNHE, Sorbonne University, Paris, Centre National de la Recherche Scientifique (FR) and CERN)

Contribution ID: 343

Type: **not specified**

## **Precision test of the muon-Higgs coupling at a high-energy muon collider**

*Tuesday 6 September 2022 13:00 (30 minutes)*

**Presenter:** REUTER, Jürgen

Contribution ID: 344

Type: **not specified**

## **Higgs-boson reheating and frozen-in DM**

*Tuesday 6 September 2022 10:30 (30 minutes)*

**Presenter:** GRZADKOWSKI, Bohdan



Contribution ID: 345

Type: **not specified**

## **Novel leptoquark pair production @LHC**

*Tuesday 6 September 2022 17:20 (30 minutes)*

**Presenter:** DORŠNER, Ilja (University of Split)

Contribution ID: **346**

Type: **not specified**

## **Indirect detections prospects for WIMP minimal dark matter**

*Saturday 3 September 2022 18:35 (15 minutes)*

**Presenter:** DONDARINI, Alessandro

Contribution ID: **347**

Type: **not specified**

## Noisy SUSY

*Tuesday 6 September 2022 16:00 (30 minutes)*

**Presenter:** NICOLIS, Stam (CNRS)

Contribution ID: 348

Type: **not specified**

## **D-brane neutrino phenomenology**

*Tuesday 6 September 2022 12:00 (30 minutes)*

**Presenter:** KOKORELIS, Christos

Contribution ID: **349**

Type: **not specified**

## **Electroweak phase transition and dark matter simplified models**

*Monday 5 September 2022 10:00 (30 minutes)*

**Presenter:** BIONDINI, Simone (Universita e INFN (IT))

Contribution ID: 350

Type: **not specified**

## **Light dark matter and its possible probes**

**Presenter:** CHAKRABORTI, Sreemanti (LAPTh)

Contribution ID: 351

Type: **not specified**

## **A visible QCD axion explanation of the XENON1T excess and of $(g-2)_\mu$**

*Tuesday 30 August 2022 17:30 (15 minutes)*

**Presenter:** GIOVANNI, Armando

Contribution ID: 352

Type: **not specified**

## **Amplification and oscillations in the power spectrum from features in the inflaton potential**

**Presenter:** KODAXIS, George (Greek)



Contribution ID: 353

Type: **not specified**

## **Scale Invariance in particle physics and cosmology**

*Tuesday 6 September 2022 12:30 (30 minutes)*

**Presenter:** KARAM, Alexandros (NICPB, Tallinn)

Contribution ID: 354

Type: **not specified**

## **Dirac, Fierz, Pauli and charged particles with spin $>1$**

*Wednesday 7 September 2022 10:30 (30 minutes)*

**Presenter:** BENAKLI, Karim (CNRS)

Contribution ID: 355

Type: **not specified**

## **Clustering and visualisation tools to study high dimensional parameter spaces: B anomalies example**

*Saturday 3 September 2022 12:30 (30 minutes)*

**Presenter:** VALENCIA, German (Monash University (AU))

Contribution ID: 356

Type: **not specified**

## Challenges in supersymmetric cosmology

*Wednesday 7 September 2022 09:30 (30 minutes)*

**Presenter:** ANTONIADIS, Ignatios (UPMC)

Contribution ID: 357

Type: **not specified**

## Physical tuning and Naturalness

*Tuesday 6 September 2022 10:00 (30 minutes)*

**Presenter:** BRANCHINA, Vincenzo

Contribution ID: 358

Type: **not specified**

## **A fresh look at proton decay in SUSY SU(5)**

*Tuesday 6 September 2022 17:00 (20 minutes)*

**Presenter:** LAMBA, Priyanka

Contribution ID: 359

Type: **not specified**

## **Grand unification and the Planck scale: An $SO(10)$ example of radiative symmetry breaking**

**Presenter:** KWAPISZ, Jan

Contribution ID: **360**

Type: **not specified**

## **New aspects of higher derivative theories**

*Saturday 3 September 2022 13:00 (30 minutes)*

**Presenter:** ASOREY, Manuel (Universidad de Zaragoza)



Contribution ID: **361**

Type: **not specified**

## Efficiently probing the SMEFT interference

*Tuesday 30 August 2022 10:00 (30 minutes)*

**Presenter:** DEGRANDE, Celine Catherine A

Contribution ID: **362**

Type: **not specified**

# Hunting scalar partners of the Higgs boson at the LHC

*Wednesday 7 September 2022 16:30 (30 minutes)*

**Presenter:** POROD, Werner

Contribution ID: **363**

Type: **not specified**

## **The fate of horizons under quantum corrections**

*Tuesday 30 August 2022 09:00 (30 minutes)*

**Presenter:** ALVAREZ, Enrique (ift-UAM/CSIC (Madrid, Spain))

Contribution ID: **364**

Type: **not specified**

## News in Flavor Physics

**Presenter:** MARTINELLI, Guido (Sapienza Universita e INFN, Roma I (IT))

Contribution ID: 366

Type: **not specified**

## Remembering Graham Ross

*Thursday 1 September 2022 18:20 (15 minutes)*

**Presenter:** ELLIS, John (Kings College London)

Contribution ID: **367**

Type: **not specified**

## **Neutrinos in an SU(5) global F theory model**

*Wednesday 7 September 2022 11:30 (30 minutes)*

**Presenter:** RABY, Stuart (The Ohio State University)

Contribution ID: **368**

Type: **not specified**

## **FIMP dark matter in heterotic M-theory**

*Thursday 1 September 2022 15:30 (30 minutes)*

**Presenter:** OVRUT, Burt (University of Pennsylvania)

Contribution ID: **369**

Type: **not specified**

## **Muon $g-2$ in SUSY with and without stable neutralinos**

*Monday 5 September 2022 12:45 (15 minutes)*

**Presenter:** MASELEK, Rafal



Contribution ID: 371

Type: **not specified**

## **A Reduced basis for CP violation in SMEFT at colliders and its application to Diboson production**

*Tuesday 30 August 2022 17:45 (15 minutes)*

**Presenter:** TOUCHÈQUE, Julien

Contribution ID: 372

Type: **not specified**

## **Starobinsky-type B-L Higgs inflation Leading beyond MSSM**

*Tuesday 6 September 2022 09:30 (30 minutes)*

**Presenter:** PALLIS, Constantinos (Aristotle University of Thessaloniki)

Contribution ID: 373

Type: **not specified**

## **A profile of a Higgs mechanism under a UV and quantum, 1st order phase transition**

*Monday 5 September 2022 17:30 (15 minutes)*

**Presenter:** KOUTROULIS, Fotis (Warsaw University)

Contribution ID: 374

Type: **not specified**

## **On three-generation super-no-scale heterotic string models**

*Wednesday 7 September 2022 13:15 (30 minutes)*

**Presenter:** RIZOS, Ioannis (University of Ioannina (GR))

Contribution ID: 375

Type: **not specified**

## **The FCC Feasibility Study and Global Collaboration**

*Saturday 3 September 2022 17:00 (1 hour)*

**Presenter:** TSESMELIS, Emmanuel (CERN)

Contribution ID: 376

Type: **not specified**

## **Multicritical point principle and electroweak scale**

*Wednesday 7 September 2022 09:00 (30 minutes)*

**Presenter:** KAWAI, Hikaru

Contribution ID: 377

Type: **not specified**

## **ALP-SMEFT interference**

*Tuesday 30 August 2022 10:30 (30 minutes)*

**Presenter:** NEUBERT, Matthias (Johannes Gutenberg University Mainz)

Contribution ID: 378

Type: **not specified**

## **Origin of mass scales in scale-symmetric extension of Standard Model**

*Wednesday 31 August 2022 18:20 (15 minutes)*

**Presenter:** MICHALAK, Paulina



Contribution ID: 379

Type: **not specified**

## **Measurements of quartic coupling and vector boson scattering in ATLAS**

*Monday 29 August 2022 12:45 (15 minutes)*

**Presenter:** PYATIIZBYANTSEVA, Diana

Contribution ID: **380**

Type: **not specified**

## **Searches for dark matter with the ATLAS and CMS detectors**

*Monday 5 September 2022 13:00 (30 minutes)*

**Presenter:** NISHU, Nishu (University of Alberta (CA))

Contribution ID: **381**

Type: **not specified**

# **Holography in anomaly flow in orbifold gauge theory**

*Wednesday 7 September 2022 12:00 (30 minutes)*

**Presenter:** HOSOTANI, Yutaka (Osaka University)

Contribution ID: **382**

Type: **not specified**

## **A string-inspired running-vacuum-model of cosmology and the current tensions in cosmological data**

*Sunday 28 August 2022 18:50 (30 minutes)*

**Presenter:** MAVROMATOS, Nikos (University of London (GB))

Contribution ID: **383**

Type: **not specified**

# **Higgs boson property measurements at the ATLAS and CMS experiments**

*Monday 29 August 2022 10:30 (30 minutes)*

**Presenter:** BRENNER, Lydia (Nikhef National institute for subatomic physics (NL))

Contribution ID: **384**

Type: **not specified**

## **Dark matter and baryogenesis from freeze-in**

*Tuesday 6 September 2022 11:30 (30 minutes)*

**Presenter:** GOUDELIS, Andreas (LPTHE - Paris)

Contribution ID: **385**

Type: **not specified**

## **Searches for additional Higgs bosons in ATLAS**

*Monday 5 September 2022 12:30 (15 minutes)*

**Presenter:** MORVAJ, Liljana

Contribution ID: **386**

Type: **not specified**

## **Grand Unification and W-mass**

*Wednesday 7 September 2022 17:00 (30 minutes)*

**Presenter:** SENJANOVIC, Goran



Contribution ID: **387**

Type: **not specified**

## **Cosmological constant and equation of state of the quantum vacuum**

*Wednesday 7 September 2022 17:30 (30 minutes)*

**Presenter:** SOLA, Joan (Universitat de Barcelona)

Contribution ID: **388**

Type: **not specified**

## **Attractor solutions and features in the power spectrum from turns in multi-field inflation**

*Wednesday 31 August 2022 19:05 (30 minutes)*

**Presenter:** CHRISTODOULIDIS, Perseas (Ewha Womans Universtity)

Contribution ID: **389**

Type: **not specified**

## **Observation of new structures in the J/psi J/psi mass spectrum in pp collisions at $\sqrt{s} = 13\sqrt{3}\text{TeV}$**

*Monday 29 August 2022 12:30 (15 minutes)*

**Presenter:** AHMAD, Muhammad (Tsinghua University (CN))

Contribution ID: 390

Type: **not specified**

## **Role of dark Higgs boson in DM physics and Higgs inflation**

*Wednesday 31 August 2022 12:00 (30 minutes)*

**Presenter:** KO, Pyungwon (KIAS)

Contribution ID: 391

Type: **not specified**

## **Dark matter from sterile-sterile neutrino mixing**

*Friday 2 September 2022 10:00 (30 minutes)*

**Presenter:** DI BARI, Pasquale (University of Southampton)

Contribution ID: **392**

Type: **not specified**

**tba**

**Presenter:** TBA

Contribution ID: 393

Type: **not specified**

## Hunting for new physics with leptonic $g-2$

*Monday 5 September 2022 12:00 (30 minutes)*

**Presenter:** PARADISI, Paride (University of Padova and INFN)

Contribution ID: 394

Type: **not specified**

## **ATLAS Inner tracker upgrade in view of HL-LHC**

*Monday 29 August 2022 18:50 (20 minutes)*

**Presenter:** VAROUCHAS, Dimitris (Centre National de la Recherche Scientifique (FR), IJCLab-Orsay)



Contribution ID: 395

Type: **not specified**

## **Dusty dark matter bubbles of a new vacuum stopped in Earth and radiating 3.5 keV X-rays**

*Sunday 28 August 2022 18:20 (30 minutes)*

**Presenter:** NIELSEN, Holger Bech (Niels Bohr Institute Theory)

Contribution ID: 396

Type: **not specified**

## **PT symmetry and Lefschetz thimbles**

**Presenter:** SARKAR, sarben

Contribution ID: 397

Type: **not specified**

## **A nonlocal 4D Einstein Gauss Bonnet theory**

*Monday 5 September 2022 19:05 (30 minutes)*

**Presenter:** CORIANO, Claudio (INFN Lecce)

Contribution ID: 398

Type: **not specified**

## **Collider searches for dark matter in extended Higgs sectors**

*Sunday 28 August 2022 17:30 (30 minutes)*

**Presenter:** ARGYROPOULOS, Spyros (Albert Ludwigs Universitaet Freiburg (DE))

Contribution ID: 399

Type: **not specified**

## **Baryogenesis from the inflaton**

*Monday 5 September 2022 11:30 (30 minutes)*

**Presenter:** QUIROS CARCELEN, Mariano (The Barcelona Institute of Science and Technology (BIST) (ES))

Contribution ID: **400**

Type: **not specified**

## **Analytic false-vacuum decay rate in the thin-wall approximation**

*Wednesday 7 September 2022 10:00 (15 minutes)*

**Presenter:** MATTEINI, Marco (Jožef Stefan Institute)

Contribution ID: **401**

Type: **not specified**

## **Inflation and gravitational effective action from higher dimensions**

*Tuesday 6 September 2022 18:40 (30 minutes)*

**Presenter:** KETOV, Sergey (Tokyo Metropolitan University)

Contribution ID: **402**

Type: **not specified**

## **A study of leptonic CP violation**

*Tuesday 30 August 2022 18:35 (30 minutes)*

**Presenter:** KANG, Sin Kyu (Seoul-Tech)



Contribution ID: 403

Type: **not specified**

## **New Physics signatures of interfering backgrounds**

*Monday 29 August 2022 13:00 (30 minutes)*

**Presenter:** WAS, Zbigniew Andrzej (Polish Academy of Sciences (PL))

Contribution ID: **404**

Type: **not specified**

## Opening

*Sunday 4 September 2022 09:30 (15 minutes)*

**Presenter:** ZOUPANOS, George

Contribution ID: 405

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 09:45 (25 minutes)*

**Presenter:** ILIOPOULOS, Jean (ENS)

Contribution ID: **406**

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 10:10 (25 minutes)*

**Presenter:** FLORATOS, Emmanuel (Unknown)

Contribution ID: **407**

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 10:35 (25 minutes)*

**Presenter:** ZWIRNER, Fabio (University and INFN, Padova (IT))

Contribution ID: **408**

Type: **not specified**

## Remembering Kounnas

**Presenter:** MUKHANOV, Slava

Contribution ID: **409**

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 11:00 (25 minutes)*

**Presenter:** ANTONIADIS, Ignatios (UPMC)

Contribution ID: **410**

Type: **not specified**

## Remembering Kounnas

**Presenter:** PORRATI, Massimo (New York University (US))



Contribution ID: **411**

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 12:15 (25 minutes)*

**Presenter:** CVETIC, Mirjam (Department of Physics & Astronomy)

Contribution ID: 412

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 11:50 (25 minutes)*

**Presenter:** KIRITSIS, Elias

Contribution ID: 413

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 17:40 (25 minutes)*

**Presenter:** QUIROS CARCELEN, Mariano (The Barcelona Institute of Science and Technology (BIST) (ES))

Contribution ID: 414

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 16:25 (25 minutes)*

**Presenter:** PARTOUCHE, Hervé (Ecole Polytechnique)

Contribution ID: 415

Type: **not specified**

## Remembering Kounnas

**Presenter:** PETROPOULOS, Marios (Ecole polytechnique - CNRS)

Contribution ID: **416**

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 16:50 (25 minutes)*

**Presenter:** ANGELANTONJ, Carlo (Universita e INFN Torino (IT))

Contribution ID: 417

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 16:00 (25 minutes)*

**Presenter:** ISRAEL, Dan (Unknown)

Contribution ID: **418**

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 18:05 (25 minutes)*

**Presenter:** FLORAKIS, Ioannis (University of Ioannina (GR))



Contribution ID: **419**

Type: **not specified**

## Remembering Kounnas

*Sunday 4 September 2022 18:30 (25 minutes)*

**Presenter:** BACHAS, Konstantinos (Aristotle University of Thessaloniki)

Contribution ID: 420

Type: **not specified**

## **Vector dark matter via a fermionic portal from a new gauge sector**

*Saturday 3 September 2022 09:30 (30 minutes)*

**Presenter:** BELYAEV, Alexander (University of Southampton & Rutherford Appleton Laboratory)

Contribution ID: 421

Type: **not specified**

## Stability of Yang Mills vacuum state

*Wednesday 7 September 2022 16:00 (30 minutes)*

**Presenter:** SAVVIDIS, Georgios (Nat. Cent. for Sci. Res. Demokritos (GR))

Contribution ID: 422

Type: **not specified**

## **Searches for new phenomena in leptonic final states using the ATLAS detector**

*Saturday 3 September 2022 18:20 (15 minutes)*

**Presenter:** WILBERN, Daniel (University of Oklahoma (US))

Contribution ID: 423

Type: **not specified**

## **Correspondence of topological classification between quantum graph extra dimension and topological matter**

*Monday 5 September 2022 18:50 (15 minutes)*

**Presenter:** INOUE, Tomonori

Contribution ID: 424

Type: **not specified**

## **$10^{\{20\}}$ Hz stochastic gravitational wave**

*Monday 5 September 2022 17:45 (15 minutes)*

**Presenter:** KAISHU, Saito

Contribution ID: 425

Type: **not specified**

## **False vacuum decay in a two-dimensional black hole spacetime**

*Saturday 3 September 2022 18:50 (15 minutes)*

**Presenter:** MIYACHI, Taiga

Contribution ID: 426

Type: **not specified**

## **Quasinormal modes of black holes in nonlinear electrodynamics**

*Wednesday 7 September 2022 12:30 (15 minutes)*

**Presenter:** NOMURA, Kimihiro



Contribution ID: 427

Type: **not specified**

## **Gravitational positivity bounds on dark photons**

*Wednesday 7 September 2022 10:15 (15 minutes)*

**Presenter:** SATO, Sota

Contribution ID: 428

Type: **not specified**

## **Index theorem on $T^2/Z_2$ orbifold with magnetic flux**

*Wednesday 7 September 2022 12:45 (15 minutes)*

**Presenter:** TAKEUCHI, Maki

Contribution ID: 429

Type: **not specified**

## **String excitation by initial singularity of Inflation**

*Wednesday 7 September 2022 13:00 (15 minutes)*

**Presenter:** NISHII, Kanji

Contribution ID: 430

Type: **not specified**

## **A complete model of cosmology and particle physics scales**

*Friday 2 September 2022 12:00 (15 minutes)*

**Presenter:** RAIDAL, Martti (National Institute of Chemical Physics and Biophysics (EE))

Contribution ID: 431

Type: **not specified**

## **Axion dark matter search**

*Friday 2 September 2022 11:30 (30 minutes)*

**Presenter:** YOUN, SungWoo (Institute for Basic Science)

Contribution ID: 432

Type: **not specified**

## Closing

**Presenter:** ZOUPANOS, George (National Technical Univ. of Athens (GR))

Contribution ID: 433

Type: **not specified**

## Closing

*Wednesday 7 September 2022 18:00 (5 minutes)*

**Presenter:** ZOUPANOS, George (National Technical Univ. of Athens (GR))

Contribution ID: 434

Type: **not specified**

## **3 - 4 short talks**

*Sunday 4 September 2022 12:40 (30 minutes)*

**Presenter:** ?