

ICHEP 2022

Thursday, July 7, 2022

Astroparticle Physics and Cosmology - Room 8 (Blu) (9:00 AM - 10:45 AM)

-Conveners: Fabio Finelli

| time | [id] title | presenter |
|----------|---|----------------------|
| 9:00 AM | [568] Tachyonic preheating and its observational signatures | TOMBERG, Eemeli |
| 9:15 AM | [1168] Ending inflation with a bang: Higgs vacuum decay in R^2 gravity | MANTZIRIS, Andreas |
| 9:30 AM | [1307] Phase transitions: A source of cosmic-frontier phenomenology | CAMARGO-MOLINA, Eiel |
| 9:45 AM | [273] Bubble wall dynamics at the electroweak phase transition | GUIGGIANI, Andrea |
| 10:00 AM | [666] Fate of electroweak symmetry in the early Universe: Non-restoration and trapped vacua in extended Higgs sectors | BIEKOETTER, Thomas |
| 10:15 AM | [158] Leptogenesis from U(1) flavor symmetry | MARCIANO, Simone |
| 10:30 AM | [56] Slow-roll inflation in Palatini F(R) gravity | Dr RACIOPPI, Antonio |

Astroparticle Physics and Cosmology - Room 8 (Blu) (11:15 AM - 1:00 PM)

-Conveners: Guenter Sigl; Fabio Finelli

| time | [id] title | presenter |
|----------|---|---------------------|
| 11:15 AM | [419] The LiteBIRD mission | PAOLETTI, Daniela |
| 11:30 AM | [1266] Redshift evolution of cosmic birefringence in CMB anisotropies | GALAVERNI, Matteo |
| 11:45 AM | [1223] Cosmic Birefringence: Cross-Spectra and Cross-Bispectra with CMB Anisotropies | GRECO, Alessandro |
| 12:00 PM | [852] DarkHistory NN: Computing early universe exotic energy injection imprints with Neural Network | SUN, Yitian |
| 12:15 PM | [1199] Relativistic Relics from the Primordial Bath: QCD Axion | HAJKARIM, Fazlollah |

Astroparticle Physics and Cosmology - Room 8 (Blu) (2:30 PM - 4:30 PM)

-Conveners: Sadakazu Haino; Mercedes Panizza

| time | [id] title | presenter |
|---------|---|---------------------|
| 2:30 PM | [1096] Gravitational-wave event validation by Advanced LIGO and Advanced Virgo detectors. Procedures and challenges for the upcoming observing runs | DI RENZO, Francesco |
| 2:45 PM | [118] Impacts of the external environment on the Virgo detector during the third Observing Run (O3: April 2019 – March 2020) | ARNAUD, Nicolas |
| 3:00 PM | [1376] Revealing the Cosmic History with Gravitational Waves | TAMARIT, Carlos |
| 3:15 PM | [1213] Very Special Linear Gravity: A Gauge Invariant Graviton Mass | SANTONI, Alessandro |
| 3:30 PM | [1267] Gravitational-wave cosmology with dark sirens: state of the art and perspectives for 3G detectors | MANCARELLA, Michele |

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| 3:45 PM | [1275] Astrometry for Gravitational-Wave Detection in the 10 nHz– μ Hz Band | Dr FEDDERKE, Michael A. |
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Astroparticle Physics and Cosmology - Room 8 (Blu) (5:00 PM - 7:15 PM)

-Conveners: Guenter Sigl; Elisa Bernardini

| time | [id] title | presenter |
|---------|--|-------------------------|
| 5:00 PM | [800] Unique Properties of Primary Cosmic Rays: Results from the Alpha Magnetic Spectrometer | YAN, Qi |
| 5:15 PM | [798] Unique Properties of Secondary Cosmic Rays: Results from the Alpha Magnetic Spectrometer | OLIVA, Alberto |
| 5:30 PM | [580] Unique Properties of the 3rd Group of Cosmic Rays: Results from the Alpha Magnetic Spectrometer | CHEN, Yao |
| 5:45 PM | [530] Properties of Cosmic Deuteron and ^3He | DELGADO, Carlos |
| 6:00 PM | [479] Properties of Cosmic Beryllium Isotopes | WEI, Jiahui |
| 6:15 PM | [918] Anisotropy of Protons and Light Primary Nuclei in Cosmic Rays Measured with the Alpha Magnetic Spectrometer on the ISS | MOLERO GONZALEZ, Miguel |
| 6:30 PM | [732] Unique Properties of Daily Proton Fluxes up to 100 GV | CONSOLANDI, cristina |
| 6:45 PM | [738] Precision Measurement of low energy positron fluxes by AMS | GÁMEZ LÓPEZ, Carmen |
| 7:00 PM | [150] Spectra of Cosmic Ray Fluorine, Sodium and Aluminum and the Hints of Low-energy Excesses | MASI, Nicolò |

Friday, July 8, 2022

Astroparticle Physics and Cosmology - Room 8 (Blu) (9:00 AM - 10:45 AM)

-Conveners: Mercedes Paniccia

| time | [id] title | presenter |
|----------|--|---------------------|
| 9:00 AM | [1226] LHCf Run II physics results in proton-proton collisions at $\sqrt{s} = 13$ TeV | Dr TIBERIO, Alessio |
| 9:15 AM | [978] Exploring dark sector parameters in light of neutron star temperatures | Prof. LIN, Guey-Lin |
| 9:30 AM | [1205] Electroweak phase transition with scalar portal to Majorana fermion dark matter | BIONDINI, Simone |
| 9:45 AM | [51] Dark sector freeze-out due to a non-Boltzmann suppression. | GANGULY, Sougata |
| 10:00 AM | [380] Boson stars, primary photons and phase transition | Dr KOZLOV, Gennady |
| 10:15 AM | [432] Constraints on dark matter self-interaction from the galactic core sizes. | SARKAR, Sambo |
| 10:30 AM | [54] First results of DOSUE-RR experiment - the most stringent constraint for dark photon CDM at the mass range of 74-\$110 μeV | ADACHI, Shunsuke |

Astroparticle Physics and Cosmology: Joint session with Dark Matter - Room 11 (Magenta A) (11:15 AM - 1:00 PM)

-Conveners: Guenter Sigl; Marco Selvi

| time | [id] title | presenter |
|----------|--|----------------------------|
| 11:15 AM | [1237] Astrophysical Searches of Ultralight Particles | PODDAR, Tanmay Kumar |
| 11:35 AM | [1052] Flavor Violating Axions in the Early Universe | YUN, Seokhoon |
| 11:50 AM | [1149] Status update of the axion helioscope BabyIAXO | MARGALEJO BLASCO, Cristina |
| 12:05 PM | [600] Search for QCD axion dark matter around 24.5 μeV using an 8-cell microwave resonant cavity haloscope and a flux-driven Josephson Parametric Amplifier | KUTLU, Çağlar |
| 12:20 PM | [473] Strategies for high mass axion searches at IBS-CAPP | Dr JEONG, Junu |
| 12:30 PM | [946] Overview of BREAD: Broadband Reflector Experiment for Axion Detection | LIU, Jesse |
| 12:45 PM | [1069] MADMAX - Towards a Dielectric Axion Haloscope | LEE, Chang |

Saturday, July 9, 2022

Astroparticle Physics and Cosmology - Room 8 (Blu) (9:00 AM - 10:45 AM)

-Conveners: Elisa Bernardini

| time | [id] title | presenter |
|----------|--|-----------------------|
| 9:00 AM | [68] Cosmological radiation density with non-standard neutrino physics | PASTOR, Sergio |
| 9:15 AM | [971] Searching for dark radiation at the LHC | MORANDINI, Alessandro |
| 9:30 AM | [1381] Strong interactions in Cosmology: strong CP problem, neutrino mass, Dark Matter, Dark Energy and gravitational radiowaves | PASECHNIK, Roman |
| 9:45 AM | [1193] Highlights from the ANTARES neutrino telescope | SPURIO, Maurizio |
| 10:00 AM | [1284] Neutrinos from core-collapse supernovae at KM3NeT | Dr GOOS, Isabel |
| 10:15 AM | [374] Recent results from the Baikal-GVD neutrino telescope | ZABOROV, Dmitry |
| 10:30 AM | [1103] Probing hadronic interactions using the latest data measured by the Pierre Auger Observatory | TRIMARELLI, Caterina |

Astroparticle Physics and Cosmology - Room 8 (Blu) (11:15 AM - 1:00 PM)

-Conveners: Elisa Bernardini; Fabio Finelli

| time | [id] title | presenter |
|----------|---|-----------------------|
| 11:15 AM | [638] The Euclid Mission | TROJA, Antonino |
| 11:30 AM | [639] Euclid: performance on main cosmological parameter science | TUTUSAUS, Isaac |
| 11:45 AM | [640] Euclid Legacy Science prospects | SORCE, Jenny |
| 12:00 PM | [1129] Baryon Acoustic Oscillations: difficulties, assumptions and a new promising cosmological standard ruler for the Euclid galaxy survey | ANSELMINI, Stefano |
| 12:15 PM | [1206] Multi-messenger studies with DESI | Dr PALMESE, Antonella |
| 12:30 PM | [62] Looking for dilaton fields in the Ly-alpha forest | HAMAIDE, Louis |

Astroparticle Physics and Cosmology - Room 8 (Blu) (2:30 PM - 4:30 PM)

-Conveners: Fabio Finelli; Chiara Caprini

| time | [id] title | presenter |
|---------|--|--|
| 2:30 PM | [1393] Early Universe Cosmology with LISA | RICCIARDONE, Angelo |
| 2:45 PM | [1258] Cosmology with massive black hole binary mergers in the LISA era. | MANGIAGLI, Alberto |
| 3:00 PM | [1230] Searching for primordial features with LISA | FUMAGALLI, Jacopo |
| 3:15 PM | [1342] Novel Manifestations of Primordial Black Holes | TAKHISTOV, Volodymyr TAKHISTOV, Volodymyr |
| 3:30 PM | [53] Signature from Primordial Black Hole evaporation | CALABRESE, Roberta |
| 3:45 PM | [96] Gravitational waves propagation as a probe of new fundamental physics | HAEGEL, Leila |

Astroparticle Physics and Cosmology - Room 8 (Blu) (5:00 PM - 7:00 PM)

-Conveners: Mercedes Panizza

| time | [id] title | presenter |
|---------|---|-----------------------|
| 5:00 PM | [343] Multi-Messenger astrophysics with the Pierre Auger Observatory | MASTRODICASA, Massimo |
| 5:15 PM | [1010] The Pierre Auger Observatory: latest results and future perspectives | SANCHEZ, Federico |
| 5:30 PM | [588] ALPACA experiment: A new air shower array to explore the sub-PeV gamma-ray sky in the southern hemisphere | SAKO, Takashi |
| 5:45 PM | [609] Latest results from DAMPE | STOLPOVSKIY, Mikhail |
| 6:00 PM | [260] CALET on the International Space Station: new direct measurements of cosmic-ray iron and nickel | Dr STOLZI, Francesco |
| 6:15 PM | [1232] The High Energy Cosmic-Radiation Detection (HERD) facility for direct cosmic-ray measurements. | MORI, Nicola |
| 6:30 PM | [339] Recent results on gamma-ray observation by the Tibet ASgamma experiment | TAKITA, Masato |