LEAP 2018 - Low Energy Antiproton Conference

Report of Contributions

Registration

Contribution ID: 1 Type: not specified

Registration

Monday 12 March 2018 09:00 (30 minutes)

Welcome address

Contribution ID: 2 Type: not specified

Welcome address

Monday 12 March 2018 09:30 (30 minutes)

Presenters: PERRIN, Bernard (Sorbonne Université); HAMEL DE MONCHENAULT, Gautier (Université Paris-Saclay (FR)); VERDIER, Patrice (CNRS-IN2P3)

Contribution ID: 3 Type: not specified

Antimatter in space

Monday 12 March 2018 10:00 (30 minutes)

Presenter: VON BALMOOS, Peter

Contribution ID: 4 Type: **not specified**

Antiproton Flux and Antiproton-to-Proton Flux Ratio in Primary Cosmic Rays Measured with the AMS on ISS

Monday 12 March 2018 11:00 (30 minutes)

Presenter: TANG, Zhi-Cheng

Contribution ID: 5 Type: **not specified**

Gravity and antimatter

Monday 12 March 2018 11:30 (30 minutes)

Presenter: CHARDIN, Gabriel

Contribution ID: 6 Type: not specified

Cosmological structure formation with negative mass

Monday 12 March 2018 12:00 (30 minutes)

Presenter: MANFREDI, Giovanni

Contribution ID: 7 Type: **not specified**

CPT violation, Lorentz violation, and low-energy antiprotons

Monday 12 March 2018 14:00 (30 minutes)

Presenter: VARGAS, Arnaldo

Contribution ID: 8 Type: not specified

The BASE Collaboration Review and Outlook

Monday 12 March 2018 14:30 (30 minutes)

Presenter: ULMER, Stefan (RIKEN (JP))

Contribution ID: 9 Type: not specified

antiproton magnetic moment (BASE)

Monday 12 March 2018 15:00 (30 minutes)

Presenter: SMORRA, Christian (RIKEN (JP))

Contribution ID: 10 Type: not specified

ELENA status

Monday 12 March 2018 16:00 (30 minutes)

Presenter: CARLI, Christian (CERN)

Contribution ID: 11 Type: not specified

Prospects of FLAIR, the Facility for Low-energy Antiproton and Ion Research

Monday 12 March 2018 16:30 (30 minutes)

Presenter: WIDMANN, Eberhard (Austrian Academy of Sciences (AT))

Contribution ID: 12 Type: not specified

The HITRAP facility for deceleration and trapping of highly charged ions and antiprotons

Monday 12 March 2018 17:00 (30 minutes)

Presenter: VOGEL, Manuel

Contribution ID: 13 Type: not specified

PUMA: a trap project for antiprotons and short-lived nuclei

Tuesday 13 March 2018 09:00 (30 minutes)

Presenter: OBERTELLI, Alexandre

Contribution ID: 14 Type: **not specified**

Search for polarized antiproton production

Tuesday 13 March 2018 09:30 (30 minutes)

Presenter: GRZONKA, Dieter

Contribution ID: 15 Type: not specified

ATRAP Experiment

Tuesday 13 March 2018 10:00 (30 minutes)

Presenter: KHATRI, Gunn

Contribution ID: 16 Type: not specified

ASACUSA CUSP antihydrogen beam experiment

Tuesday 13 March 2018 11:00 (30 minutes)

Presenter: KURODA, Naofumi

Contribution ID: 17 Type: not specified

1S-2S Spectroscopy of Antihydrogen in the ALPHA Experiment

Tuesday 13 March 2018 11:30 (30 minutes)

Presenter: RASMUSSEN, Chris (CERN)

Contribution ID: 18 Type: not specified

The AEGIS Antimatter Gravity Experiment

Tuesday 13 March 2018 12:00 (30 minutes)

Presenter: KRASNICKY, Daniel

Contribution ID: 19 Type: not specified

Status of the GBAR experiment at CERN

Tuesday 13 March 2018 14:00 (30 minutes)

Presenter: MANSOULIE, Bruno (Université Paris-Saclay (FR))

Contribution ID: 20 Type: not specified

Measuring antimatter gravitation with trapped antihydrogen: The ALPHA-g experiment

Tuesday 13 March 2018 14:30 (30 minutes)

Presenter: BERTSCHE, William Alan (University of Manchester (GB))

Contribution ID: 21 Type: not specified

New in-beam measurement of the hydrogen hyperfine splitting and prospects

Tuesday 13 March 2018 15:00 (30 minutes)

Presenter: MALBRUNOT, Chloe (CERN)

Contribution ID: 22 Type: not specified

Nuclear stopping power of antiprotons

Wednesday 14 March 2018 09:00 (30 minutes)

Presenter: NORDLUND, Kai (University of Helsinki)

Contribution ID: 23 Type: not specified

Differential cross sections in collisions of lowenergy antiprotons with ions and atoms

Wednesday 14 March 2018 09:30 (30 minutes)

Presenter: BONDAREV, Andrey

Contribution ID: 24 Type: not specified

Laser cooling of anions for ultracold antihydrogen

Wednesday 14 March 2018 10:00 (30 minutes)

Presenter: KELLERBAUER, Alban

Contribution ID: 25 Type: not specified

Cooling of mixed ion crystals for GBAR

Wednesday 14 March 2018 11:00 (30 minutes)

Presenter: WOLF, Sebastian (Johannes Gutenberg-Univesity Mainz)

Contribution ID: 26 Type: not specified

Lyman-α source for laser cooling antihydrogen

Wednesday 14 March 2018 11:30 (30 minutes)

Presenter: ZAMBRANO, Daniel

Contribution ID: 27 Type: not specified

Antihydrogen formation via charge exchange between positronium and antiproton

Wednesday 14 March 2018 12:00 (30 minutes)

Presenter: ZURLO, Nicola

Contribution ID: 28 Type: not specified

A new approach for measuring antiproton annihilation at rest with Timepix3

Wednesday 14 March 2018 14:00 (20 minutes)

Presenter: GLIGOROVA, Angela (Austrian Academy of Sciences (AT))

Contribution ID: 29 Type: not specified

The PANDA experiment at FAIR

Wednesday 14 March 2018 14:20 (20 minutes)

Presenter: TOMASI-GUSTAFSSON, Egle

Contribution ID: 30 Type: not specified

GAPS, low-energy antimatter for indirect dark-matter search

Wednesday 14 March 2018 14:40 (20 minutes)

Presenter: VANNUCCINI, Elena (INFN)

Contribution ID: 31 Type: not specified

A Detector for Measuring the Ground State Hyperfine Splitting of Antihydrogen

Wednesday 14 March 2018 15:00 (20 minutes)

Presenter: KOLBINGER, Bernadette

Contribution ID: 32 Type: not specified

Testing CPT with the Anti-hydrogen Molecular Ion

Wednesday 14 March 2018 16:00 (20 minutes)

Presenter: MYERS, Edmund

Contribution ID: 33 Type: not specified

Toward an improved comparison of the proton-toantiproton charge-to-mass ratio

Wednesday 14 March 2018 16:20 (20 minutes)

Presenter: HIGUCHI, Takashi (University of Tokyo (JP))

Contribution ID: 34 Type: not specified

Electric dipole moment of light nuclei

Wednesday 14 March 2018 16:40 (20 minutes)

Presenter: YAMANAKA, Nodoka

Contribution ID: 35 Type: not specified

Low-energy antiproton scattering

Thursday 15 March 2018 09:00 (30 minutes)

Presenter: KADYROV, Alisher

Contribution ID: 36 Type: not specified

Ab-initio calculations of reactions involving the 3-body system (p^- ,e+,e-) between the e- +H⁻(n=2) and e- +H⁻(n=3)

Thursday 15 March 2018 09:30 (30 minutes)

Presenter: DUFOUR, Marianne

Contribution ID: 37 Type: **not specified**

Four-body treatment of the antihydrogen-positronium system: binding, structure, resonant states and collisions

Thursday 15 March 2018 10:00 (30 minutes)

Presenter: FROELICH, Piotr

Contribution ID: 38 Type: not specified

Production of light (anti-)(hyper-)nuclei in heavy-ion collisions

Thursday 15 March 2018 11:00 (30 minutes)

Presenter: MASCIOCCHI, Silvia

Contribution ID: 39 Type: not specified

Guiding and manipulating Rydberg positronium using inhomogeneous electric fields

Thursday 15 March 2018 11:30 (30 minutes)

Presenter: ALONSO, Alberto

Contribution ID: 40 Type: not specified

Tests of discrete symmetries in positronium decays with the J-PET detector

Thursday 15 March 2018 12:00 (30 minutes)

Presenter: MOSKAL, Pawel (Jagiellonian University)

Type: not specified

Contribution ID: 41

Recent progress in positronium experiments for Bose- Einstein condensation

Thursday 15 March 2018 14:00 (30 minutes)

Presenter: ISHIDA, Akira (University of Tokyo (JP))

Contribution ID: 42 Type: not specified

Observation of the hyperfine spectrum of antihydrogen

Thursday 15 March 2018 14:30 (30 minutes)

Presenter: FRIESEN, Tim (TRIUMF (CA))

Contribution ID: 43 Type: not specified

Spectroscopy of the 1S – 2P transition of antihydrogen

Thursday 15 March 2018 15:00 (30 minutes)

Presenter: MOMOSE, Takamasa (University of British Columbia)

Contribution ID: 44 Type: **not specified**

Study of time reversal symmetry in the decay of Ortho- Positronium atoms using J-PET

Thursday 15 March 2018 16:00 (20 minutes)

Presenter: RAJ, Juhi

Contribution ID: 45 Type: not specified

Accelerators Validating Antimatter Physics

Thursday 15 March 2018 16:20 (20 minutes)

Presenter: WELSCH, Carsten

Contribution ID: 46 Type: not specified

General public lecture

Thursday 15 March 2018 17:00 (45 minutes)

Presenter: PUGET, Jean-Loup

Contribution ID: 47 Type: **not specified**

Recent B factories results on CP violation

Friday 16 March 2018 09:00 (30 minutes)

Presenter: EMERY-SCHRENK, Sandrine

Contribution ID: 48 Type: not specified

Single-photon laser spectroscopy of cold antiprotonic helium

Friday 16 March 2018 09:30 (30 minutes)

Presenter: HORI, Masaki

Contribution ID: 49 Type: **not specified**

Constraints for fundamental short-range forces from the neutron whispering gallery, and extention of this method to atoms and antiatoms

Friday 16 March 2018 10:00 (20 minutes)

Presenter: NESVIZHEVSKY, Valery (ILL)

Contribution ID: 50 Type: not specified

Laser cooled anions as a sympathetic coolant for antiprotons

Friday 16 March 2018 10:20 (20 minutes)

Presenter: FESEL, Julian (University of Vienna (AT))

Contribution ID: 51 Type: not specified

Positronium and Muonium two-photon laser spectroscopy

Friday 16 March 2018 11:10 (30 minutes)

Presenter: CRIVELLI, Paolo (Eidgenoessische Technische Hochschule Zuerich (ETHZ) (CH))

Contribution ID: **52** Type: **not specified**

Production of cold muonium for future atomic physics and gravity experiments

Friday 16 March 2018 11:40 (30 minutes)

Presenter: SOTER, Anna

Contribution ID: 53 Type: not specified

Conclusion

Friday 16 March 2018 12:10 (20 minutes)