

Xth International Conference on the Interconnection between Particle Physics and Cosmology (PPC 2016)

ICTP-SAIFR – São Paulo, Brazil / July 11 – 15, 2016

Start	End	Monday, July 11	Tuesday, July 12	Wednesday, July 13	Thursday, July 14	Friday, July 15
9:30	11:00	Registration (at 9:00) Welcome and Presentation of ICTP-SAIFR (at 10:00) Chair: Raul Abramo Gravitational wave detection by the first Advanced LIGO observation run (R. Sturani) (at 10:15)	Particle Physics II Chair: Alberto Tonerio Ventura (25'), Hensel (25'), Craig (40')	Cosmic Rays I Chair: Fabio Iocco Serpico (40'), Vecchi (25'), Kiryluk (25')	Cosmology III Chair: Vinicius Miranda de Rham (45'), Porto (22'), Contreras (22')	Dark Matter & Particle Physics Chair: Nicolás Bernal Hooberman (25'), Tomei (25'), Dijkstra (25')
11:00	11:30	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
11:30	13:00	Particle Physics I Chair: Sylvain Fichet White (25'), Heisel (25'), Chimenti (25')	Dark Matter III Chair: Francesca Calore Marinacci (40'), Bozorgnia (20'), Silverwood (15'), de Los Rios (15')	Dark Matter IV Chair: Nassim Bozorgnia Gelmini (45'), Coderre (25')	Cosmic Rays II Chair: Pasquale Serpico Silva (30'), Santos (20'), Palomares-Ruiz (20'), Arbetletche (20')	Conclusions Chair: Eduardo Pontón Galli (45'), Wagner (45')
13:00	15:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
15:00	16:30	Dark Matter I Chair: Fabio Iocco Slatyer (40'), Calore (25'), Cirelli (25')	Cosmology I Chair: Riccardo Sturani Sobreira (25'), Batista (20'), Rivera (20'), Piattella (20')	Dark Matter V Chair: Nassim Bozorgnia Johnson (25'), Ogawa (25'), Gentile (25')	Particle Physics III Chair: Douglas Singleton Tonerio (22'), Fichet (22'), Matheus (22'), Garcia-Cely (22')	DEPARTURE
16:30	17:00	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	
17:00	18:30	Dark Matter II Chair: Fabio Iocco Poulin (25'), Vargas (25'), Vecchi (25')	Cosmology II Chair: Rafael Porto Marozzi (25'), Santos (25'), Siffert (20'), Le Delliou (20')	Poster Session	Particle Physics IV Chair: Maria Eugenia Cabrera Singleton (22'), Markkanen (22'), Bernál (22'), Fong (22')	

Abstracts and more information at: <http://www.ictp-saifr.org/ppc2016>

Monday, July 11

9:00 – 10:00: REGISTRATION

10:00 – 10:15: Welcome and Presentation of ICTP-SAIFR

10:15 – 11:00: Riccardo Sturani (ICTP-SAIFR/IFT-UNESP): Gravitational wave detect by the first Advanced LIGO observation run

11:30 – 13:00: Particle Physics I

Chair: Sylvain Fichet

Brandon White (LALN): The MAJORANA Experiment search for neutrino-less double beta decay. (20+5 min)

Mark Heisel (MPI Kernphysik): First results from GERDA Phase II (20+5 min)

Pietro Chimenti (UEL): Double Chooz multi-detector results (20+5 min)

15:00 – 16:30: Dark Matter I

Chair: Fabio Iocco

Tracy Slatyer (MIT): Indirect detection of Dark Matter (35+5 min)

Francesca Calore (GRAPPA): Unveiling the origin of the Galactic centre GeV excess (20+5 min)

Marco Cirelli (LPTHE Jussieu Paris): Constraints on Dark Matter from radio and microwave surveys (20+5 min)

17:00 – 18:30: Dark Matter II

Chair: Fabio Iocco

Vivian Poulin (LAPTh): CMB constraints on decaying dark matter (20+5 min)

German A. G. Vargas (PUC-Chile): New measurements of anisotropies in the gamma-ray sky and their dark matter interpretation (20+5 min)

Manuela Vecchi (IFSC-USP): Cosmic ray positrons: constraints on propagation parameters and dark matter searches in view of AMS-02 data (20+5 min)

Tuesday, July 12

9:30 – 11:00: Particle Physics II

Chair: Alberto Tonero

Andrea Ventura (INFN): SUSY searches with the ATLAS detectors (20+5 min)

Carsten Hensel (CBPF): Searches for Supersymmetry with the CMS Detector (20+5 min)

Nathaniel Craig (UCSB): Physics Beyond the Standard Model After the First Year of LHC 13 (35+5 min)

11:30 – 13:00: Dark Matter III

Chair: Francesca Calore

Federico Marinacci (MIT): LambdaCDM cosmology below cluster scales: current results and challenges of state-of-the-art numerical simulations (35+5 min)

Nassim Bozorgnia (GRAPPA): The dark matter distribution of simulated Milky Way-like galaxies (16+4 min)

Hamish Silverwood (GRAPPA): Determining the Local Dark Matter Density (13+2 min)

Martin de Los Rios (IATE): The MeSSI (Merging Systems Identification) Algorithm (13+2 min)

15:00 – 16:30: Cosmology I

Chair: Riccardo Sturani

Flavia Sobreira (IFT-UNESP): DES (20+5 min)

Ronaldo C. Batista (UFRN): Structure formation in a Λ viscous CDM universe (16+4 min)

Alexander Bonilla Rivera (U. Distrital-Bogotá): Exploring the Dark Universe: Constraints on dynamical dark energy models from CMB, BAO and Growth Rate Measurements (16+4 min)

Olivier Piattella (UFES): Dark matter velocity effects on the CMB (16+4 min)

17:00 – 18:30: Cosmology II

Chair: Rafael Porto

Giovanni Marozzi (CBPF): Precision cosmology via the time of flight of ultra-relativistic particles (20+5 min)

Edivaldo M. Santos (IF-USP): A Bayesian Estimate of the CMB-large Scale Structure Cross-correlation (20+5 min)

Beatriz B. Siffert (UFRJ): Type Ia Supernovae with the J-PAS survey (16+4 min)

Morgan P. Le Delliou (IFT-UNESP): Progresses on expansion/collapse separation: general fluids, local conditions, spherically symmetric (16+4 min)

Wednesday, July 13

9:30 – 11:00: Cosmic Rays I

Chair: Fabio Iocco

Pasquale D. Serpico (LAPTh): What can we learn from cosmic rays? (35+5 min)

Manuela Vecchi (IFSC-USP): Precise cosmic ray flux measurements with the AMS-02 experiment (20+5 min)

Joanna Kiryluk (Stony Brook U.): Neutrino Physics with IceCube - Latest Results (20+5 min)

11:30 – 13:00: Dark Matter IV

Chair: Nassim Bozorgnia

Graciela Gelmini (UCLA): Direct detection of Dark Matter (40+5 min)

Daniel Coderre (U. Bern): The XENON1T WIMP Search (20+5 min)

15:00 – 16:30: Dark Matter V

Chair: Nassim Bozorgnia

Tessa Johnson (U. California, Davis): The DarkSide-50 Direct Dark Matter Search with Liquid Argon (20+5min)

Hiroshi Ogawa (ICRR, Tokyo): XMASS experiment (20+5 min)

Valerio Gentile (INFN): NEWS: Nuclear Emulsions for WIMP Search (20+5 min)

Thursday, July 14

9:30 – 11:00: Cosmology III

Chair: Vinicius Miranda

Claudia de Rham (CWRU, Cleveland): How light is gravity? (40+5 min)

Rafael Porto (ICTP-SAIFR/IFT-UNESP): The Tune of Love and the Nature(ness) of Spacetime (18+4 min)

Dagoberto Contreras (U. British Columbia): Parity-violation constraints from Planck polarization (18+4 min)

11:30 – 13:00: Cosmic Rays II

Chair: Pasquale Serpico

Eduardo C. e Silva (CNPEM): Selected Particle Physics Highlights of the Fermi Large Area Telescope (25+5)

Edivaldo M. Santos (IF-USP): Measurements of muons in air showers using data from the Pierre Auger Observatory: mass composition and tests of hadronic interaction models (16+4)

Sergio Palomares-Ruiz (IFIC): High-energy neutrinos: an analysis of the 4-year IceCube data (16+4)

Luan B. Arbeletche (UFPeI): Influence of diffractive physics on ultra-high energy extensive air showers (16+4)

15:00 – 16:30: Particle Physics III

Chair: Douglas Singleton

Alberto Toner (ICTP-SAIFR): New physics and signal-background interference in $gg \rightarrow HZ$ production at LHC (18+4 min)

Sylvain Fichet (ICTP-SAIFR): New scalar states in composite Higgs models (18+4 min)

Ricardo D'Elia Matheus (IFT-UNESP): N-Relaxion (18+4 min)

Camilo A. Garcia-Cely (U. Libre de Bruxelles): Polynomial spectral features from dark matter and connection to the diphoton resonance (18+4 min)

17:00 – 18:30: Particle Physics IV

Chair: Maria Eugenia Cabrera

Douglas Singleton (California State U., Fresno): Hawking-like radiation model for inflation and baryogenesis (18+4 min)

Tommi Markkanen (King's College London): Effects of spacetime curvature on electroweak vacuum stability and dark matter generation in the early Universe (18+4 min)

Nicolás Bernal (ICTP-SAIFR): Z2 SIMP Dark Matter (18+4 min)

Chee Sheng Fong (IF-USP): Sharing but not caring: dark matter and baryon asymmetry (18+4 min)

Friday, July 15

9:30 – 11:00: Dark Matter & Particle Physics

Chair: Nicolás Bernal

Benjamin H. Hooberman (UIUC): Dark Matter searches with the ATLAS Detector (20+5 min)

Thiago Tomei (NCC-UNESP): Search for Dark Matter at CMS (20+5 min)

Hans Dijkstra (CERN): SHiP: a new multipurpose beam-dump experiment at the SPS (20+5 min)

11:30 – 13:00: Conclusions

Chair: Eduardo Pontón

Silvia Galli (IAP Paris): Understanding tensions in the LCDM model (40+5 min)

Carlos Wagner (ANL-Chicago): Perspectives on Particle Physics (40+5 min)