

Invisibles15 Workshop Proceedings

Session	Title	Presenter	Materials (ctrl+click)	
	<i>BSM review</i>	MURAYAMA, Hitoshi	slides	video
Higgs and colliders	<i>Looking for new physics with Run2 LHC</i>	SANZ, Veronica	slides	video
Higgs and colliders	<i>Dark sectors and Higgs portals at colliders</i>	KHOZE, Valentin	slides	video
PhD Forum	<i>Dark Matter with Non-linear Higgs portals</i>	BRIVIO, Ilaria		
PhD Forum	<i>Unitarity Constraints on Dimension-Six Operators</i>	CORBETT, Tyler	slides	video
PhD Forum	<i>Lepton jets from radiation in the dark sector</i>	BUSCHMANN, Malte	slides	video
PhD Forum	<i>Reheating with a Composite Higgs</i>	CROON, Djuna	slides	video
PhD Forum	<i>Viability of Minimal Neutrinophilic two-Higgs-Doublet Models</i>	PEREZ, Yuber	slides	video
	<i>Discussion</i>	DE RÚJULA, Álvaro		video
Dark Matter	<i>Dwarf spheroidal galaxies as degenerate gas of free fermions</i>	DOMCKE, Valerie	slides	video
Cosmology	<i>eV sterile neutrinos problem and cosmological bounds for secret interactions</i>	SAVIANO, Ninetta	slides	
Higgs and collider physics	<i>Indirect Searches Illuminate Singlet - Doublet Dark Matter</i>	TZIVELOGLOU, Pantelis	slides	video
Neutrinos and Flavour	<i>CUORE's search for neutrinoless double-beta decay</i>	MOSTEIRO, Pablo	slides	video
Cosmology	<i>"Secret" neutrino interactions</i>	ARCHIDIACONO, Maria	slides	
Neutrinos and Flavour	<i>Indirect searches for sterile neutrinos at high-luminosity Z-factory experiments</i>	DE ROMERI, Valentina	slides	
Higgs and colliders	<i>Singlino(-higgsino) dark matter at IceCube and LHC</i>	MUNIR, Shoaib	slides	video
Dark Matter	<i>Evidence of DM in the Sun?</i>	VINCENT, Aaron	slides	video
Cosmology	<i>Seesaw Scale vs Cosmology</i>	LOPEZ PAVON, Jacobo	slides	

Higgs and colliders	<i>Discriminating between SUSY and Non-SUSY Higgs Sectors through the Ratio H to bb/H to $\tau\tau$</i>	ARGANDA, Ernesto	slides	
Dark Matter	<i>A taste of dark matter: Flavour constraints on pseudoscalar mediators</i>	KAHLHOEFER, Felix	slides	
Neutrinos and Flavour	<i>The Majorana Demonstrator search for neutrinoless double-beta decay</i>	O'SHAUGHNESSY, Christopher	slides	
Cosmology	<i>Helicogenesis: WIMPy baryogenesis with sterile neutrinos</i>	RACKER, Jean	slides	
Neutrinos and Flavour	<i>ESSnuSB: a facility to explore the second oscillation maximum, status of the design</i>	WILDNER, Elena	Slides slidesPPT	
Higgs and colliders	<i>Accurate determination of the Baryon and Dark Matter Abundance in Supersymmetric scenarios</i>	ARCADI, Giorgio	slides	
Dark Matter	<i>The Flavour Portal to Dark Matter</i>	ZALDIVAR, Bryan	slides	
Neutrinos and Flavour	<i>Significance for leptonic CP violation</i>	BLENNOW, Mattias	slides	
Higgs and colliders	<i>More Higgses at LHC: the EW road to baryogenesis</i>	MIGUEL NO, Jose	slides	
Cosmology	<i>Testing leptogenesis at SHiP, BELLE and LHC</i>	DREWES, Marco	slides	
Dark Matter	<i>How to quantify the compatibility of DM direct detection experiments</i>	BOZORGNIA, Nassim	slides	
Neutrinos and Flavour	<i>Bayesian analysis of neutrino oscillation data</i>	BERGSTROM, Johannes	slides	
Higgs and colliders	<i>Composite resonance effects on the EW chiral lagrangian at NLO</i>	SANZ-CILLERO, Juan Jose	Slides slidesPPT	
Cosmology	<i>A Fresh Look at keV Sterile Neutrino Dark Matter from Frozen-In Scalars</i>	ADULPRAVITCHAI, Adisorn	slides	
Dark Matter	<i>Multimediator models for the galactic center gamma ray excess</i>	Prof. LIU, Zuwei	slides	
	<i>Expectations and opportunities for the run 2 of the LHC</i>	MANGANO, Michelangelo	slides	
	<i>SUSY at the LHC</i>	ELLWANGER, Ulrich	slides	video

Axions and CP violation	<i>The strong CP problem and Axions</i>	Prof. PECCEI, Roberto	slides	video
Axions and CP violation	<i>ADMX and other axion searches</i>	RYBKA, Gray	slides	video
Axions and CP violation	<i>Axion phenomenology</i>	REDONDO, Javier		video
PhD Forum	<i>Axionic signals at colliders with a dynamical Higgs</i>	DEL REY, Rocio		
PhD Forum	<i>Lepton flavour, CP and discrete symmetries</i>	NEDER, Thomas	slides	video
PhD Forum	<i>On the CP-odd Higgs Boson</i>	DE LIMA SUMENSARI, Olcyr	slides	video
PhD Forum	<i>CP-odd sigma decomposition</i>	HIERRO, Ignacio	slides	video
	<i>Discussion</i>	Dr. RAFFELT, Georg		video
Flavour and symmetry	<i>Flavour and CP violation in Higgs decays</i>	KOPP, Joachim	slides	video
PhD Forum	<i>Complete bounds on right-handed neutrino mixing</i>	HERNANDEZ, Josu	slides	video
PhD Forum	<i>Sequential dominance in models of flavour</i>	BJORKEROTH, Fredrik	slides	video
PhD Forum	<i>Symmetries of Symmetries</i>	TRAUTNER, Andreas	slides	video
PhD Forum	<i>Phenomenology of Heavy Majorana Neutrinos Within the ISS</i>	MARCANO, Xabier	slides	video
	<i>Leptogenesis news</i>	RIUS, Nuria	slides	video
Cosmology	<i>Spiral Inflation</i>	BARENBOIM, Gabriela	slides	video
Dark Matter	<i>Constraints on leptophobic GeV DM from neutrino oscillation experiments</i>	COLOMA, Pilar	slides	video
Neutrinos and Flavour	<i>Minimal muon anomalous magnetic moment</i>	BIGGIO, Carla	slides	video
Higgs and colliders	<i>Scalar DM: from minimal to composite model</i>	LOPEZ HONOREZ, Laura	slides	video
Neutrinos and Flavour	<i>Interpretation of the high energy IceCube data</i>	ILLANA, Jose	slides	video
Dark Matter	<i>Antideuterons from Decaying Gravitino Dark Matter</i>	DELAHAYE, Timur		video

Higgs and colliders	<i>Emergin jets from a dark sector</i>	SCHWALLER, Pedro Klaus	slides	video
Cosmology	<i>Search for the dark photon in π^0 decays</i>	KOVAL, Michal	slides	video
Dark Matter	<i>Halo-independent tests of dark matter direct detection signals</i>	HERRERO GARCIA, Juan	slides	video
Neutrinos and Flavour	<i>Possible Interpretations of IceCube High-Energy Neutrino Events</i>	PANES, Boris	slides	video
Higgs and colliders	<i>Making the Most of the Relic Density for Dark Matter Searches at the LHC 14 TeV Run</i>	JACQUES, Thomas	slides	video
Cosmology	<i>Effective Field Theory of Gravity and Dark Energy</i>	CODELLO, Alessandro	slides	video
Dark Matter	<i>Global constraints on vector-like effective WIMP interactions</i>	MACHADO, Pedro	slides	video
Cosmology	<i>Testing the homogeneity and isotropy of the Universe with recent observations</i>	MAJEROTTO, Elisabetta	slides	video
Higgs and colliders	<i>Explaining the CMS $eejj$ excess with R-parity violating supersymmetry and implications for neutrinoless double beta decay</i>	MITRA, Manimala	slides	video
Neutrinos and Flavour	<i>Propagation of astrophysical neutrinos in a background of ultra-light scalar field dark matter</i>	REYNOSO, Matias	slides	video
Dark Matter	<i>Local Z2 scalar dark matter model confronting galactic GeV-scale γ-ray and muon ($g-2$)</i>	PARK, Wan-Il	slides	video
Cosmology	<i>Robustness of cosmic neutrino background detection in the CMB</i>	NIRO, Viviana	slides	video
Neutrinos and Flavour	<i>Sterile neutrinos at future lepton colliders</i>	FISCHER, Oliver	slides	video
Higgs and colliders	<i>Measuring the Higgs coupling to light quarks</i>	STAMOU, Emmanuel	slides	video
Dark Matter	<i>Anatomy of Coannihilation with a Scalar Top Partner</i>	VOGL, Stefan	slides	video
Neutrinos and Flavour	<i>Constraining discrete flavour symmetries with neutrino oscillation experiments</i>	BALLETT, Peter	slides	video
Higgs and colliders	<i>ALPs at colliders</i>	MIMASU, Ken		video

Cosmology	<i>Understanding Inflation with Large-Scale Sctructure</i>	DE PUTTER, Roland	slides	video
Dark Matter	<i>New Bounds on Monochromatic Neutrino Lines from DM Decays</i>	GUSTAFSSON, Michael	slides	video
Higgs and colliders	<i>Right-handed neutrinos and the Higgs boson</i>	WEILAND, Cedric	slides	video
Cosmology	<i>On Planck CMB Anomalies, Alignments and Calibration</i>	NOTARI, Alessio	slides	video
Neutrinos and Flavour	<i>Two-loop snail diagrams: relating neutrino masses to DM</i>	FARZAN, Yasaman	slides	
Neutrinos and Flavour	<i>Current status and Future Prospects of Neutrino Oscillation</i>	WANG, YiFang	Slides slidesPPT	
Neutrinos and Flavour	<i>Minimal Flavour Violation and Unification</i>	BARBIERI, Riccardo	slides	
Neutrinos and Flavour	<i>Absolute Neutrino Mass Measurements</i>	MERTENS, Susanne	slides	
Neutrinos and Flavour	<i>Neutrinoless double beta decay experiments</i>	BAUDIS, Laura	slides	
Neutrinos and Flavour	<i>The quest for leptonic CP violation</i>	HUBER, Patrick	slides	
	<i>Discussion</i>	ZUKANOVICH FUNCHAL, Renata	Slides questions ShiP	
Neutrinos and Flavour	<i>Dark matter and continous flavour symmetries</i>	ZUPAN, Jure	slides	
PhD Forum	<i>Flavour scenarios in 5D SO(10): order and anarchy interplay</i>	VICINO, Denise		
PhD Forum	<i>Economizing the LBNF configuration with current experiments</i>	GHOSH, Monojit	slides	
PhD Forum	<i>Heavy sterile phenomenology and the MiniBooNE low energy excess</i>	ROSS-LONERGAN, Mark	slides	
PhD Forum	<i>Revisiting the quantum decoherence scenario as an explanation for the LSND anomaly</i>	BAKHTI, Pouya	slides	
	<i>Searching for Dark Matter at Neutrino Factories</i>	BATELL, Brian	slides	
Outreach: The Limits of the Universe	<i>Alvaro de Rujula</i>	DE RUJULA, Alvaro		

Outreach: The Limits of the Universe	<i>Michelangelo Mangano</i>	MANGANO, Michelangelo		
Outreach: The Limits of the Universe	<i>Carlos Frenk</i>	FRENK, Carlos		
Outreach: The Limits of the Universe	<i>Antoni Muntadas</i>	MUNTADAS, Antoni		
Outreach: The Limits of the Universe	<i>Round Table</i>			
	<i>Astroparticle theory review</i>	GONDOLO, Paolo	slides	
	<i>IceCube: astro- and particle physics</i>	HALZEN, Francis	slides	
PhD Forum	<i>Methods for new physics searches in neutrino telescopes</i>	ARGUELLES, Carlos	slides	
PhD Forum	<i>Diffuse neutrinos from extragalactic supernova remnants: Dominating the 100 TeV IceCube flux</i>	IZAGUIRRE, Ignacio	slides	
PhD Forum	<i>Neutrino oscillations in media: flavor, helicity, and pair correlations</i>	VOGEL, Hendrik	slides	
PhD Forum	<i>Kinematic Constraints on a Dark Disk</i>	KRAMER, Eric	slides	
	<i>Multi-Messenger Aspects of Cosmic Neutrinos</i>	AHLERS, Markus	slides	
	<i>DM experiments</i>	APRILE, Elena	slides	
	<i>DM disks</i>	MCCULLOUGH, Matthew	slides	
	<i>Dark matter annihilation in the Galactic Center</i>	HOOPER, dan	slides	
PhD Forum	<i>Studies on the XENON100 electromagnetic background</i>	MAYANI, Daniel	slides	
PhD Forum	<i>Limits on leptophilic dark matter models from AMS positron and antiproton fluxes</i>	ALI CAVASONZA, Leila	slides	

PhD Forum	<i>Measurement of the Charge and Light Yield of Low Energy Electronic and Nuclear Recoils in Liquid Xenon at Different Electric Fields</i>	ANTHONY, Matthew	slides	
PhD Forum	<i>Searching for bosonic superWIMPs in XENON100</i>	BARROW, Peter	slides	
	<i>Discussion</i>	BOEHM, Celine		
	<i>Latest results from AMS</i>	WENG, Zhili	slides	
	<i>Neutrinos in Cosmology</i>	WONG, Yvonne	SlidesPDF slidesODP	
PhD Forum	<i>Goldstone inflation</i>	SETFORD, Jack	slides	
PhD Forum	<i>Leptogenesis in low scale seesaw models</i>	KEKIC, Marija	slides	
PhD Forum	<i>Baryogenesis via mesino oscillations</i>	GHALSASI, Akshay	SlidesPDF slidesPPT	
PhD Forum	<i>Leptogenesis in natural low-scale seesaw mechanisms</i>	LUCENTE, Michele	slides	
	<i>Cosmological results from Planck 2015</i>	GALLI, Silvia	slides	
	<i>Galaxy Formation: Cold Dark Matter is not enough</i>	MADAU, Piero	slides	
	<i>Discussion</i>	BARENBOIM, Gabriela		
	<i>Cosmology perspectives</i>	SMOOT, George	SlidesPPT slidesPDF	
	<i>Future neutrino oscillation experiments</i>	KAJITA, Takaaki	slides	
	<i>Physics opportunities at future high-energy colliders</i>	GIANOTTI, Fabiola	SlidesPDF slidesPPT	
Outreach: Extra dim.	<i>Mario Livio</i>	LIVIO, Mario	slides	
Outreach: Extra dim.	<i>Fabiola Gianotti</i>	GIANOTTI, Fabiola		
Outreach: Extra dim.	<i>Linda Henderson</i>			
Outreach: Extra dim.	<i>Lisa Randall</i>	RANDALL, Lisa		