

IDM2010



lundi 26 juillet 2010 - vendredi 30 juillet 2010

Montpellier 2 University

Scientific Program

Dark Matter Candidates

Neutralinos, super-WIMP dark matter, non-supersymmetric dark matter, leptophilic dark matter, axions, Q-balls, Kaluza-Klein dark matter, WIMP dark matter, sterile neutrinos,...

Plenary Speakers :

Bayesian constraints on supersymmetric neutralino dark matter - Roberto Ruiz de Austri (Valencia)

On the stability of particle dark matter - Thomas Hambye (ULB)

Super-WIMP dark matter - Manoj Kaplinghat (UC Irvine)

Axions - Pierre Sikivie (Florida)

Feebly Interacting Dark Matter - John March-Russell (Oxford)

Sterile neutrino dark matter - Oleg Ruchayskiy (Lausanne)

Dark Matter Direct Searches

microwave cavity searches, CDMS, XENON, XMASS, DAMA, EdelweissII, CresstII, ZeplinIII, ArDM, LUX, DEEP/CLEAN, Eureka, WARP,...

Plenary Speakers :

Theoretical Perspectives on DAMA in Light of Recent Searches - Neal Weiner (New York)

Microwave cavity searches for axions - Les Rosenberg (Seattle)

CDMS - Tarek Saab (Florida)

Xenon - Marc Schumann (Zurich)

DAMA - Pierluigi Belli (Rome)

Edelweiss-II - Eric Armengaud (CEA/IRFU)

Cresst-II - Wolfgang Seidel (Munich)

Zeplin-III - Tim Sumner (Imperial College)

ArDM - Filippo Resnati (CERN)

LUX - Tom Shutt (Case Western)

DEAP/CLEAN - Mark Boulay (Queen's University)

EURECA - Hans Kraus (Oxford)

Dark Matter Indirect Searches

the Pamela/Atic/Fermi anomaly, cosmic ray neutrinos, photons, antiprotons, positrons, cosmic ray propagation uncertainties, multi channel cosmic ray signatures of dark matter, dark matter signatures in the CMBR,...

Plenary Speakers :

Positrons and Antiprotons - Piergiorgio Picozza (Roma 2)

Gamma-rays - Jan Conrad (Stockholm)

IceCube - Carlos Perez de los Heros (Uppsala)

Antares - Pascal Gay (LPC)

The Pamela/Atic/Fermi Anomaly - Dark Matter or not ? - Julien Lavalle (Torino)

Cosmic Ray propagation uncertainties and Dark Matter - Richard Taillet (Annecy)

Multi-channel cosmic ray signatures of dark matter - Joakim Edsjö (Stockholm)

Constraining neutrinos masses in the PLANCK era - Stephane Plaszczynski (Orsay)

Radio and Microwave Constraints on Dark Matter - Douglas Finkbeiner (Harvard)

Structure Formation & N-body simulations

numerical simulations of structure formation with dark matter, simulations including baryons, understanding the Galactic center, the Lyman-alpha forest, weak lensing, dwarf galaxies, tidal streams, CDM galaxy core/satellite problems, dark stars,...

Plenary Speakers :

Baryons in structure formation simulations - Andrew Zentner (Pittsburgh)

Do we understand the Galactic Center ? - Joe Silk (Oxford)

Dwarf Galaxies, Milky Way satellites, and stellar streams - Wyn Evans (Cambridge)

Dark Matter Searches at the LHC

expectations, experimental issues, meta-stable new particles,...

Plenary Speakers :

Theoretical expectations of dark matter detection at the LHC - Howard Baer (Oklahoma)

Experimental Issues of Dark Matter Detection at the LHC - Claus Horn (SLAC)

Metastable Particles at the LHC - Chris Hill (Bristol)