

GGI Conference The Dark Matter connection: Theory & Experiment

Programme

Monday - May 17

- 14.30 (10) Conference introduction – P. Ullio
14.40 (30+5) Precision cosmology, status and perspectives
- A. Melchiorri (Rome I)
15.15 (30+5) The LambdaCDM paradigm - successes and challenges
- A. Klypin (New Mexico)
15.50 (30+5) Determining all gas properties in galaxy clusters from the dark matter profile alone
- M. Roncadelli (Pavia)
- 16.25-17.00 Coffee break
- 17.00 (30+5) The local dark matter halo density
- R. Catena (Heidelberg)
17.35 (30+5) Systematic uncertainties in the determination of the local dark matter density
- M. Pato (IAP, Paris)
18.10 (30+5) The recombination epoch of the Universe with dark matter: constraints on self-annihilation cross sections
- S. Galli (Rome I)

Tuesday - May 18

- 9.00 (30+5) The gamma-ray sky after Fermi and implications for DM detection
- S. Murgia (SLAC)
9.35 (30+5) The electron/positron puzzle in the Fermi and PAMELA era
- A. Morselli (Rome II)
10.10 (30+5) Cosmic ray modelling
- R. Taillet (Annecy)
- 10.45 - 11.15 Coffee break
- 11.15 (30+5) Implications for cosmic ray propagation from recent electron and gamma-ray measurements.
- D. Grasso (Pisa)
11.50 (30+5) Indirect dark matter detection - status and perspectives
- M. Cirelli (CERN)
12.25 (30+5) Decaying dark matter
- A. Ibarra (Munich)

Lunch

14.30 (30+5) Mirror dark matter
- Z. Berezhiani (L'Aquila)

15.05 (30+5) Constraints from dark matter searches in cosmic
antimatter
- F. Donato (Torino)

15.40 (30+5) PAMELA without dark matter or pulsars
- J. Roberts (NYU)

16.15-16.45 Coffee break

16.45 (30+5) Model-independent bounds and discovery potential for
WIMPs at colliders
- T. Tait (Irvine)

17.20 (30+5) Neutrino signals from dark matter decay
- M. Grefe (DESY)

17.55 (30+5) Cosmic ray constraints on decaying gravitino dark matter
- N.E. Bomark (Bergen)

20.00 Social dinner at "Trattoria Omero"

Wednesday - May 19

9.00 (30+5) Status of Xenon-100 Dark Matter Detector
- E. Aprile (Columbia)

9.35 (30+5) DM direct detection with cryogenic detectors
- J. Jochum (Tuebingen)

10.10 (30+5) Results of the DAMA/LIBRA experiment
- P. Belli (Rome II)

11.45 - 11.15 Coffee break

11.15 (30+5) Low mass WIMP region and recent experimental claims
- T. Schwetz (Heidelberg)

11.50 (30+5) Ion-channeling in direct dark matter detectors
- G. Gelmini (UCLA)

12.25 (30+5) Freeze-in of FIMP dark matter
- K. Jedamzik (Montpellier)

Lunch

- 14.30 (30+5) The fine-scale structure of the Milky Way's halo
- S. White (Munich)
- 15.05 (30+5) Dwarf galaxies in cosmic structure formation
- L. Mayer (Zurich)
- 15.40 (30+5) A dark matter disk in the Milky Way
- J. Read (Zurich)
- 16.15-16.45 Coffee break
- 16.45 (30+5) New physics models and direct detection
- N. Fornengo (Torino)
- 17.20 (30+5) Aspects of Higgs portal DM models: light scalar singlet
and intense gamma ray line from hidden vector
- T. Hambye (Bruxelles)

Thursday - May 20

- 9.00 (30+5) Dark matter at colliders
- G. Polesello (Pavia)
- 9.35 (30+5) Neutralino/Sneutrino dark matter
- G. Belanger (Annecy)
- 10.10 (30+5) Dark matter and bayesian approach to SUSY models
- L. Roszkowski (Sheffield)
- 10.45 - 11.15 Coffee break
- 11.15 (30+5) Clear signatures of dark matter in the hidden sector
- Y. Mambrini (Saclay)
- 11.50 (30+5) EWIMPs and Gravitino dark matter
- K.-Y. Choi (Pusan)
- 12.25 (30+5) LHC capability for dark matter
- B. Dutta (Texas)
- Lunch
- 14.30 (30+5) Supersymmetry, dark matter and the LHC
- P. Nath (Boston)
- 15.05 (30+5) Yukawa unified SUSY, dark matter and the LHC
- S. Kraml (Grenoble)
- 15.40 (30+5) Dark matter-motivated searches for exotic 4th generation
quarks in Tevatron and early LHC data
- S. Su (Arizona)
- 16.15-16.45 Coffee break

16.45 (30+5) Dark matter stars

- D. Spolyar (Fermilab)

17.20 (30+5) How to constrain your favorite decaying dark matter model

- J. Redondo (Munich)

Friday - May 21

9.00 (30+5) The case for axion dark matter

- P. Sikivie (Florida)

9.35 (30+5) Hadronic axion and axinos dark matter

- J.E. Kim (Seoul)

10.10 (30+5) Axion cold dark matter in standard and non-standard cosmologies

- P. Gondolo (Utah)

10.45-11.15 Coffee Break

11.15 (30+5) Sterile neutrino dark matter

- O. Ruchayski (Lausanne)

11.50 (30+5) Betting on dark matter in the race for new physics

- A. Masiero (Padova)

12.25 (10) Conclusions - Covi