

## W2: Cosmology

### Schedule of Talks

Thursday, December 15, 2011

| Time   | Name of the Speaker     | Title   |
|--|-------------------------|---|
| <b>Topic: Dark matter (30 minutes)</b>           |                         |   |
| 1400 – 1420                                      | Manoj Kaplinghat        | Fermi-LAT constraints on WIMP dark matter   |
| 1420 – 1430                                      | Sukanya Chakrabarty     | A new probe of the distribution of dark matter in galaxies                                  |
| <b>Topic: Cluster of galaxies (50 minutes)</b>   |                         |   |
| 1430 – 1450                                      | Yen-Ting Lin            | A WISE-Chandra view of baryon content evolution in galaxy clusters                          |
| 1450 – 1510                                      | Aseem Paranjape         | Random walks, moving barriers and the large scale structure                                 |
| 1510 – 1520                                      | Graziano Rossi          | Halo shapes in the cosmic web   |
| <b>1520 – 1550</b>                               | <b>Tea/Coffee break</b> |   |
| <b>Topic: Large scale structure (50 minutes)</b> |                         |   |
| 1550 – 1610                                      | Marco Bruni             | Relativistic effects and large scale structure: Post-Newtonian dynamics                     |
| 1610 – 1620                                      | Felipe Marin            | High-order clustering of WiggleZ galaxies   |
| 1620 – 1630                                      | Surhud More             | Galaxy-dark matter connection: A cosmological perspective                                   |
| 1630 – 1640                                      | Charles Jose            | Weighing neutrinos using high redshift galaxy luminosity functions                          |
| <b>Topic: Dark energy (50 minutes)</b>           |                         |   |
| 1640 – 1700                                      | Filippo Vernizzi        | Structure formation with clustering quintessence  |
| 1700 – 1710                                      | Anjan Ananda Sen        | Deviation from $\Lambda$ CDM: Pressure parametrization                                      |
| 1710 – 1720                                      | Valeria Pettorino       | Interacting dark energy: Impact on CMB and structure formation                              |
| 1720 – 1730                                      | Amna Ali                | Modified gravity a la Galilean: Late time cosmic acceleration and observational constraints |

## W2: Cosmology

### Schedule of Talks

Sunday, December 18, 2011

| Time  | Name of the Speaker     | Title  |
|---|-------------------------|--|
| <b>Topic: 21-cm cosmology (20 minutes)</b>                          |                         |  |
| 1400 – 1420   | Tzu-Ching Chang         | 21-cm cosmology  |
| <b>Topic: Gravitational lensing (70 minutes)</b>                    |                         |  |
| 1420 – 1440   | Sudeep Das              | A new view of the cosmic microwave background with ACT                                     |
| 1440 – 1500   | Gil Holder              | Gravitational lensing of the CMB and the South Pole Telescope                              |
| 1500 – 1520   | Tommaso Treu            | Cosmology from gravitational time delays   |
| 1520 – 1530   | Anupreet More           | The SL2S arcs sample   |
| <b>1530 – 1600</b>  | <b>Tea/Coffee break</b> |  |
| <b>Topic: Cosmic microwave and infrared background (90 minutes)</b> |                         |  |
| 1600 – 1620   | Olivier P. Dore         | Planck early measurements of the cosmic infrared background anisotropies                   |
| 1620 – 1630   | Stephane Ilic           | CMB/CIB cross-correlation for ISW detection  |
| 1630 – 1640   | Marina Cortes           | On the prior dependence of constraints on tensor-to-scalar ratio                           |
| 1640 – 1650   | Tristan Smith           | Constraints on neutrino interaction using cosmological observations                        |
| 1650 – 1700   | P.S. Saumia             | Probing the anisotropic expansion history of the universe with cosmic microwave background |
| 1700 – 1710   | Nidhi Joshi             | Statistics of statistical anisotropy measures  |
| 1710 – 1720   | Pravabati Chinganbam    | Search for non-Gaussianity in the CMB with geometrical and topological quantities          |
| 1720 – 1730   | Dmitri Pogosyan         | Geometrical statistics of non-Gaussian cosmological fields                                 |

## W2: COSMOLOGY

### POSTERS (25)

December 16 – 17, 2011

| No. | AUTHOR                      | TITLE   |
|-----|-----------------------------|---|
| 01  | Ujjaini Alam                | Non-parametric reconstruction of dark energy equation of state from diverse datasets                    |
| 02  | Rizwan ul Haq Ansari        | Perturbations in dark energy models with evolving speed of sound  |
| 03  | Soumen Basak                | A needlet ILC analysis of WMAP 7-year temperature data  |
| 04  | Ningombam Chandrachani Devi | Evolution of spherical over density in thawing dark energy models                                       |
| 05  | Santanu Das                 | Leakage of power from dipole to higher multipoles due to non-circular WMAP beam                         |
| 06  | Walter Del Pozzo            | Precision measurements of the Hubble constant with gravitational waves                                  |
| 07  | Abhik Ghosh                 | Characterizing the diffuse foregrounds for redshifted 21-cm HI signal: GMRT 150 MHz observation         |
| 08  | Tuhin Ghosh                 | Characterisation of CMB foregrounds   |
| 09  | Rituparno Goswami           | On the shear-free perturbations of FLRW universe  |
| 10  | Tapomoy Guha Sarkar         | The cross-correlation of 21-cm signal and the Lyman-alpha forest: A cosmological probe                  |
| 11  | Deepak Jain                 | Observational cosmology and the cosmic distance duality relation  |
| 12  | Fabien Lacasa               | Non-Gaussianity of point-sources foregrounds  |
| 13  | Suman Majumdar              | Matched filter detection of ionized bubbles in simulated redshifted 21-cm maps of epoch of reionization |
| 14  | Sanjit Mitra                | Effect of asymmetric beams in CMB experiments: Importance and remedy                                    |
| 15  | Sourav Mitra                | Joint QSO – CMB constraints on reionization history   |
| 16  | Sharvari Nadkarni Ghosh     | Extending the domain of validity of Lagrangian perturbation theory                                      |
| 17  | Roshina Nandra              | The interplay between cosmological expansion and massive objects  |
| 18  | Anne Marie Nzioki           | A geometrical approach to strong gravitational lensing in $f(R)$ gravity                                |
| 19  | Isha Pahwa                  | Higher dimensional cosmological models - An alternative explanation for late time cosmic acceleration   |
| 20  | Jayanti Prasad              | Cosmological parameter estimation using Particle Swarm Optimization                                     |
| 21  | Prakash Sarkar              | The luminosity, colour and morphology dependence of galaxy structures in the Sloan Digital Sky Survey   |
| 22  | Arman Shafieloo             | The crossing statistic: Dealing with unknown errors in the dispersion of type Ia supernovae             |
| 23  | Itzadah Thongkool           | How delicate are the $f(R)$ gravity models with disappearing cosmological constant?                     |
| 24  | Pranjal Trivedi             | CMB non-Gaussianity sourced by primordial magnetic fields   |

