



Measuring and Modelling Redshift-Space Distortions in Galaxy Surveys

Sexten Center for Astrophysics (Sesto, ITALY)

21-25 July 2014

Monday 21

- 8:45-9:15 Registration
- 9:15-9:30 Welcome and Organization (Gigi Guzzo)

(Morning chair: **Emiliano Sefusatti**)

- 9:30-11:00
 - **Nick Kaiser** - Small-scale velocities from cosmic-flow measurements and RSD
 - **Lado Samushia** - Measuring growth rate and expansion history of the Universe with BOSS
 - **Beth Reid** - A 2.5% measurement of the growth rate from small-scale redshift space clustering of SDSS-III CMASS galaxies
- 11:00-11:30 Coffee Break
- 11:30-13:00
 - **Davide Bianchi** - The streaming model of RSD: a bivariate Gaussian description for the galaxy pairwise velocity distributions
 - **Michael Kopp** – The Gaussian streaming model
 - **Yipeng Jing** - Redshift distortions as a probe for cosmology: a way to improve theoretical modeling
- 13:00 LUNCH (free choice around the CfA)

(Afternoon chair: **Will Percival**)

- 14:30-16:00
 - **Uros Seljak** - RSD: theoretical challenges and opportunities
 - **Juliana Kwan** - Cosmic Emulators for Redshift Space Distortions
 - **Istvan Szapudi** – Sufficient statistics in cosmology
- 16:00-16:30 Coffee Break
- 16:30-17:30
 - **Ben Granett** - Extracting beta from the VIPERS density field
 - **Stefano Rota** - A measurement of the galaxy power spectrum at $z \sim 1$ from VIPERS
- 17:30-18:30 DISCUSSION

Tuesday 22

- **MORNING: Collaborative work / Discussions**

- 12:00 LUNCH (free choice around the CfA)

(Chair: **John Peacock**)

- 14:00-15:30
 - **Teppei Okumura** - Modeling nonlinear power spectrum of galaxies in redshift space
 - **Francisco Kitaura** - Disentangling galaxy bias and redshift space distortions
 - **Vincent Desjacques** - The scale dependence of bias: implications for RSD model building
- 15:30-16:00 Coffee Break
- 16:00-17:30
 - **Tobias Baldauf** - Halo Bias and its Evolution in the Peak Model
 - **Hector Gil-Marin** - Dark matter and halo bispectrum in redshift space
 - **Julien Bel** – Accurate estimate of the linear bias parameter
- 17:30-19:00 **DISCUSSION**

Wednesday 23

COLLABORATIVE WORK / FREE DISCUSSION / LONGER EXCURSIONS

Thursday 24

- **MORNING: Collaborative work / Discussions**

- 12:00 LUNCH (free choice around the CfA)

(Chair: **Beth Reid**)

- 14:00-15:30
 - **John Peacock** - Recasting halo catalogues for RSD
 - **Emanuele Castorina** – Halo bias in neutrino cosmologies
 - **Andrew Johnson** - The 6dF Galaxy Survey: Cosmological constraints from the velocity power spectrum
- 15:30-16:00 Coffee Break
- 16:00-18:00
 - **Enzo Branchini** - Apparent luminosity fluctuations as an alternative RSD-like probe to peculiar velocities and growth rate. Recent results, pros and cons

- **Faizan Mohammad** - Measuring RSD from the group-galaxy cross correlation
- **Adam Hawken** – Growth rate from voids RSD
- **Yan-Chuan Cai** - Redshift space distortion in voids

- **20:00 WORKSHOP DINNER at “LANTERNA VERDE”**

Friday 25

(Chair: Luigi Guzzo)

- 9:30-11:00
 - **Carmelita Carbone** – Large-scale structure in simulations with massive neutrinos
 - **Jianhua He** – Large-scale structure in $f(R)$ gravity
 - **[Free Slot]**
- 11:00-11:30 Coffee Break
- 11:30-12:30 **Wrap-up / Discussion:**
 - Systematics in RSD measurements: where do we stand?
 - Selection effects and systematics in specific observing modes (e.g. Euclid slitless strategy)
 - ... more as suggested during the meeting...
- 13:00 LUNCH (free choice around the CfA)
- 14:30-16:30 **For those still around: Collaborative work / Discussions**