



Measuring and Modelling Redshift-Space Distortions in Galaxy Surveys

Sexten Center for Astrophysics (Sesto, ITALY)

21-25 July 2014

Updated: 18 July, 12:00

Monday 21

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

(Morning chair: **Emiliano Sefusatti**)

- 9:30-11:15
 - **Nick Kaiser** – *Introductory Talk*
 - **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
- 11:15-11:45 Coffee Break
- 11:45-12:45
 - **Davide Bianchi** - The streaming model of RSD: a bivariate Gaussian description for the galaxy pairwise velocity distributions
 - **Michael Kopp** – The Gaussian streaming model
- 13:00 LUNCH (free choice around the CfA)

(Afternoon chair: **Will Percival**)

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

- 18:30-18:30 **DISCUSSION**

Tuesday 22

- **MORNING: Collaborative work / Discussions**
- 12:00 LUNCH (free choice around the CfA)

(Chair: **John Peacock**)

- 14:00-15:30
 - **Tepei 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
- 16:00-18:00
 - **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
- 18:00-19:00 **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**)

- 14:00-15:45
 - **John Peacock** - Recasting halo catalogues for RSD
 - **Carmelita Carbone** – Large-scale structure in simulations with massive neutrinos
 - **Emanuele Castorina** – Halo bias in neutrino cosmologies
 - **Andrew Johnson** - The 6dF Galaxy Survey: Cosmological constraints from the velocity power spectrum
- 15:45-16:15 Coffee Break

- 16:15-18:15
 - **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
 - **Martin Crocce** – Measuring RSD in photometric data : status and prospect for the Dark Energy Survey
 - **Ariel Sanchez** - Measuring RSD using clustering wedges
- **20:00 WORKSHOP DINNER at “LANTERNA VERDE”**

Friday 25

(Chair: Luigi Guzzo)

- 9:00-11:00
 - **Adam Hawken** – Growth rate from voids RSD
 - **Yan-Chuan Cai** - Redshift space distortion in voids
 - **Jianhua He** – Large-scale structure in $f(R)$ gravity
 - **Jason Dossett** – Improved constraints on $f(R)$ gravity using ISiTGR and the WiggleZ power spectrum
- 11:00-11:30 Coffee Break
- 11:30-12:30 **Wrap-up / Discussion (Lead: Roman Scoccimarro)**
 - 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**