



COSFORM



THE ROYAL SOCIETY

THE COSMIC WEB: FROM GALAXIES TO COSMOLOGY

PROGRAMME

17 - 19 JUNE 2019

ROYAL OBSERVATORY EDINBURGH

LECTURE THEATRE

SUMMARY

MONDAY	TUESDAY	WEDNESDAY
9:00 - 10:45 Cosmic Web: theory I	9:00 - 10:37 Filaments	9:00 - 10:41 Alignments
10:45 - 11:30 COFFEE	10:37 - 11:15 COFFEE	10:41 - 11:25 COFFEE
11:30 - 12:30 Cosmic Web: theory II	11:15 - 12:39 Voids I	11:25 - 12:41 Cosmic Web: galaxies I
12:30 - 14:00 LUNCH	12:39 - 14:00 LUNCH	12:41 - 14:00 LUNCH
14:00 - 14:45 Discussion	14:00 - 14:32 Voids II	14:00 - 15:28 Cosmic Web: galaxies II
14:45 - 15:17 Cosmic Web: observations I	14:32 - 15:30 Discussion	
15:17 - 15:35 Poster lightning talks		
15:35 - 16:15 COFFEE	15:30 - 16:15 COFFEE	15:28 - 16:00 COFFEE
16:15 - 17:29 Cosmic Web: observations II	16:15 - 17:07 Tidal Field	16:00 - 18:00 Discussion
	19:00 - CONFERENCE DINNER	

9:00 - 9:05 Opening remarks

COSMIC WEB: THEORY

9:05 - 9:45 [Christophe Pichon](#) (*Forecasting special events in the cosmic history of the large scale structures*)

9:45 - 10:05 [Dmitri Pogosyan](#) (*Connectivity of the Cosmic Web*)

10:05 - 10:25 [Sergei Shandarin](#) (*The Unique Traits of the Dark Matter Web*)

10:25 - 10:45 [Job Feldbrugge](#) (*The caustic skeleton of the cosmic web*)

10:45 - 11:30 COFFEE

11:30 - 11:50 [Oliver Hahn](#) (*A phase space view of the cosmic web*)

11:50 - 12:10 [Mark Neyrinck](#) (*Spinning (in) the Cosmic Spiderweb*)

12:10 - 12:30 [Jaime Forero-Romero](#) (*The β -Skeleton view of the cosmic web*)

12:30 - 14:00 LUNCH

14:00 - 14:45 Discussion

COSMIC WEB: OBSERVATIONS I

14:45 - 15:05 [Elmo Tempel](#) (*Detecting filamentary pattern in the cosmic web: alignment of galaxies in the SDSS*)

15:05 - 15:17 [Stephane Arnouts](#) (*Exploring the Cosmic Web in 2D with robust deep learning Photo-z's*)

POSTER SESSION

[Victor Bonjean](#) (*A global picture of galaxy properties around cosmic filaments at low redshift*)

[Duncan Campbell](#) (*A Halo Model for The Intrinsic Alignments of Galaxies*)

[Chris Davies](#) (*Universalities in weak lensing peak statistics*)

[Marian Douspis](#) (*SZ effect: Cosmic web and Cosmology*)

[Boryana Hadzhiyska](#) (*Large-scale galaxy clustering in IllustrisTNG: contesting the "vanilla" HOD model*)

[Joachim Harnois-Deraps](#) (*Cosmo-SLICs: the numerical gate to lensing analyses beyond two-point statistics*)

[Darsh Kodwani](#) (*Screened fifth forces in parity breaking correlation functions*)

15:17 - 15:36 [Egidijus Kukstas](#) (*Environment from cross-correlations: linking cause to effect in galaxy quenching*)

[Francesca Lane](#) (*A trajectories approach to modelling the non-linear power spectrum*)

[Nicola Malavasi](#) (*Like a spider in its web: a study of the Large Scale Structure around the Coma cluster*)

[Mutsumi Minoguchi](#) (*Dynamical Evolution of Voids with Surrounding Gravitational Tidal Field*)

[Thibaud Moutard](#) (*Heavily-Obscured X-ray AGNs shed Light on the Connection between the Quenching of M^* Galaxies and the Cosmic Web*)

[Elena Sarpa](#) (*Non-linear reconstruction for the density and velocity fields: from BAO to voids*)

[Florian Sarron](#) (*Pre-processing of galaxies in cosmic filaments around AMASCFI clusters in the CFHTLS*)

[Malgorzata Siudek](#) (*The dependence of galaxy evolutionary paths on environment from z 0.7 revealed with VIPERS*)

[Hideki Tanimura](#) (*Multi-wavelength analysis of the large-scale Cosmic filaments*)

[Yang Wang](#) (*The Influence of Environment on Simulated Galaxy Properties*)

[Qianli Xia](#) (*A gravitational lensing detection of filamentary structures connecting luminous red galaxies*)

[Pauline Zarrouk](#) (*Exploiting cross-correlations between photometric and spectroscopic samples*)

15:36 - 16:15

COFFEE

COSMIC WEB: OBSERVATIONS II

16:15 - 16:35 [Khee-Gan Lee](#) (*IGM Tomography of the z 2 Cosmic Web*)

16:35 - 17:47 [Benjamin Horowitz](#) (*A Constrained Reconstruction Approach to Modeling the High Redshift Cosmic Web*)

16:47 - 17:07 [Francisco Kitaura](#) (*Reconstructing the cosmic web from Galaxy Surveys*)

17:07 - 17:27 [Florent Leclercq](#) (*Cosmic web analysis and information theory*)

17:27 - 17:39 [Metin Ata](#) (*Understanding high redshift structures from initial fluctuations until today*)

TUESDAY, 18 JUNE

9:00 - 9:05 Announcements

9:05 - 9:45 [Rien van den Weygaert](#) (*The Multiscale Cosmic Web: its Morphology and Caustic Skeleton*)

FILAMENTS

9:45 - 10:05 [Marius Cautun](#) (*The diversity of cosmic filaments*)

10:05 - 10:17 [Ulrike Kuchner](#) (*Preparation and characterisation of cosmic filaments for galaxy cluster outskirts observations*)

10:17 - 10:29 [Nabila Aghanim](#) (*Hot baryons in the largest cosmic structure*)

10:29 - 10:41 [Marius Ramsoy](#) (*Properties of Cold Mode Accretion Filaments of Milky Way Sized Galaxies*)

10:41 - 11:15

COFFEE

VOIDS

- 11:15 - 11:35 [Ravi Sheth](#) (*Energy vs density peaks for modeling haloes and voids*)
11:35 - 11:47 [Yanchuan Cai](#) (*Combining lensing and redshift-space distortions around voids*)
11:47 - 12:07 [Jaan Einasto](#) (*Biasing phenomenon*)
12:07 - 12:27 [Seshadri Nadathur](#) (*Beyond BAO: better cosmological measurements using voids*)
12:27 - 12:39 [Federico Dávila-Kurbán](#) (*Enter the Void: non-standard clustering measures inside Illustris voids*)
12:39 - 14:00 LUNCH
14:00 - 14:20 [Harry Desmond](#) (*The Fifth Force in the Local Cosmic Web*)
14:20 - 14:32 [Enrique Paillas](#) (*Unveiling modified gravity using cosmic voids*)
14:32 - 15:30 Discussion
15:30 - 16:15 COFFEE

TIDAL FIELD/ASSEMBLY BIAS

- 16:15 - 16:35 [Jounghun Lee](#) (*The Impact of Coherent Tides on the Structure Formation and Its Dependence on the Cosmic Web*)
16:35 - 16:47 [Chris Duckworth](#) (*Satellites as potential tracers: Dynamical modelling of galaxy orbits in different cosmic web environments*)
16:47 - 17:07 [Cristiano Porciani](#) (*Origin of assembly bias for galaxy-sized haloes*)
19:00 - CONFERENCE DINNER

WEDNESDAY, 19 JUNE

- 9:00 - 9:05 Announcements

ALIGNMENTS

- 9:05 - 9:45 [Sandrine Codis](#) (*Galaxy alignments induced by the cosmic web*)
9:45 - 10:05 [Xi Kang](#) (*Galaxy alignment from small to large scales*)
10:05 - 10:17 [Peng Wang](#) (*The alignment between the galaxy and the cosmic web*)
10:17 - 10:29 [Pablo Lopez](#) (*Deviations from the TTT: halo properties and spin alignments*)
10:29 - 10:41 [Punyakoti Ganeshiah Veena](#) (*The Cosmic Ballet: spin and shape alignments of haloes and galaxies in the cosmic web*)
10:41 - 11:25 COFFEE

COSMIC WEB: GALAXIES I

- 11:25 - 11:45 [Rita Tojeiro](#) (*The galaxy-halo connection on the cosmic web*)
11:45 - 12:05 [Charlotte Welker](#) (*Galaxy kinematics in the cosmic web: insights from integral field spectroscopy*)
12:05 - 12:17 [Florence Durret](#) (*MACS J0717.5+3745 and its extended filament*)
12:17 - 12:37 [Cora Uhlemann](#) (*A semiclassical path to the cosmic web*)
12:37 - 14:00 LUNCH

COSMIC WEB: GALAXIES II

- 14:00 - 14:20 [Miguel Aragon-Calvo](#) (*How the cosmic web modulates galaxy formation and evolution*)
- 14:20 - 14:32 [Katarina Kraljic](#) (*Galaxies flowing in the oriented saddle frame of the cosmic web*)
- 14:32 - 14:52 [Mehmet Alpaslan](#) (*Galaxy quenching in the Cosmic Web*)
- 14:52 - 15:04 [Clotilde Laigle](#) (*Group connectivity in COSMOS: a tracer of mass assembly history*)
- 15:04 - 15:16 [Shadab Alam](#) (*Quenching and galactic conformity in eBOSS*)
- 15:16 - 15:28 [Maret Einasto](#) (*Multiscale cosmic web detachments in supercluster cocoons: the case of A2142*)
- 15:28 - 16:00 COFFEE
- 16:00 - 18:00 Discussion and closing remarks