

Virgo Consortium Meeting

Wednesday-Friday 14th-16th Dec 2016

Ogden Centre for Fundamental Physics - new building

Normal talks are 10+5 mins. Please make sure you talk only for 10 mins to allow for interruptions/questions

Wednesday 14/Dec

Galaxy population: EAGLE, Illustris and onwards

(Chair: Volker)

13:50-14:00	Carlos Frenk	<i>Welcome</i>
14:00-14:20	Bower, Theuns, Schaye	Current projects and plans
14:20-14:30		Discussion
14:30-14:45	James Trayford	The observable properties of EAGLE galaxies, modelling with SKIRT
14:45-15:00	Dylan Nelson	The galaxy colour distribution (Illustris TNG)
15:00-15:15	Stu Mcalpine	Galaxy-black hole link
15:15-15:30	Chris Lovell	High redshift resimulations with EAGLE
15:30-15:45	Bart Clauwens	Testing the cumulative number density matching with EAGLE
15:45-16:15		<i>Coffee/tea</i>

Clusters: BAHAMAS/MACSYS/Hydrangea/C-EAGLE, etc

(Chair: Peter)

16:15-16:35	Bahe+Barnes	Current projects and plans
16:35-16:45		Discussion
16:45-17:00	Thomas Armitage	Velocity bias of galaxies in C-Eagle clusters
17:00-17:15	Monique Henson	Weak lensing in C-EAGLE and EAGLE
17:15-17:30	Philipp Busch	Projected galaxy clusters: bias and splashback
17:30-17:45	Stuart Muldrew	Back to the future: predicting the growth of protoclusters
17:45-18:00	Joop Schaye	Bahamas

18:00-18:30

Discussion

Dinner in Durham

Thursday 15/Dec

Auriga/Apostle: Milky Way and environs

(Chair: Matthieu)

9:15-9:35	Springel/Frenk	Overview
9:35-9:45		Discussion
9:45-10:00	Robert Grand	The disks of Auriga galaxies
10:00-10:15	Facundo Gomez	The ex-situ stellar population of the Auriga discs
10:15-10:30	Till Sawala	The Apostle project
10:30-10:45	Oliver Newton	MW satellite galaxies: how many could there be?

10:45-11:00	Azi Fattahi	The dark matter content of MW and M31 satellites
11:00-11:30		Coffee/tea
11:30-11:45	Marius Cautun	The unusual orbit kinematics of the Galactic Satellites
11:45-12:00	Christine Simpson	Satellite quenching in Auriga galaxies
12:00-12:15	Alejandro Benitez	"Dark" RELHICs in the Local Group
12:15-12:30	Martin Sparre	Merger simulations with Auriga: starbursts & transformation

New astrophysics and the subgrid

(Chair: Simon)

12:30-13:00	Panel: Bower, Naab, Pfrommer, Schaye, Springel	What is the correct approach to the design and inclusion of more/better physics at resolved or subgrid level? Calibration, convergence, tuning ...
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13:00-14:00 *Lunch*

14:00-14:15	Ruediger Pakmor	Magnetic fields in the Auriga galaxies
14:15-14:30	Rebekka Bieri	Shine like a quasar – feedback from radiatively driven AGN winds
14:30-14:45	Hannah Ross	X-ray heating during the cosmic dawn
14:45-15:00	John Regan	The little guy has the last laugh when forming SMBHs
15:00-15:15	Sebastian Bustamante	Spin evolution of SMBHs in a cosmological context
15:15-15:30	Peter Johansson	Post-Newtonian dynamical modelling of SMBH using KETJU

15:30-16:00 *Coffee/tea*

Beyond CDM: WDM, SIDM, MG

(Chair: Sylvia)

16:00-16:30	Panel: Barreira, Llinares Li, Pontzen	What is worth a major campaign?
16:30-16:45	Sownak Bose	The VVV project
16:45-17:00	Jens Stuecker	The density distribution of single stream regions
17:00-17:15	Mark Lovell	Sterile neutrinos in galaxy formation
17:15-17:30	Mark Neyrinck	Simplicity inside haloes from origami to large-scale structure
17:30-17:45	Andrew Robertson	What does the Bullet cluster tell us about SIDM?
17:45-18:00	Wojtek Hellwing	MOG Millennium and beyond

Breakout time and work in groups

19:30 *Workshop Dinner*

Friday 16/Dec

Large-scale structure, MXXL/hyperMillennium, SA

(Chair: Joop)

9:30-10:00	Panel: Angulo, Cole, Henriques, Jasche	Simulation frontier for next-generation surveys
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10:00-10:15	Guilhem Lavaux	Cosmic flow reconstruction
10:15-10:30	Alex Smith	A lightcone catalogue from MXXL
10:30-10:45	Giulia Despali	Baryonic physics and subhalo mass function – lensing implications
10.45-11.00	Malin Renneby	Galaxy-galaxy lensing constraints in L-gals
11:00-11:30		<i>Coffee/tea</i>
11:30-11:45	Claudia Lagos	SURFS experiments: synthetic universes for future surveys
11:45-12:00	Rob Yates	Successfully modelling the chemistry of elliptical galaxies and the ICM

Databases/archives/algorithms

(Chair Richard Bower)

12:00-12:30	Panel: Helly, Lemson Nelson	Virgo archive, public releases, future needs
12:30-12:45	Matthieu Schaller	SWIFTly solving gravity: Like in the 80s but better
12:45-13:00	Jens Jasche	Non-perturbative Bayesian analysis of cosmic large-scale structure
13:00-13:15	Keri Dixon	Reionization and the Local Group

13:15-14:00 *Lunch*

The future

14:00-14:45	Special session: Deason	Diversity
14:45-15:30	Panel: Frenk, Schaye, Springel, Thomas, White	

15:30 **Breakout time and work in groups**

END