

## *Little LSS workshop in Granada*

November 20<sup>th</sup> – 24<sup>th</sup> 2017

### Monday Nov. 20<sup>th</sup>: Lecture Room

15:00 – 15:30	Anatoly Klypin	Skies and Universes: Accessing cosmological simulations and theoretical predictions
15:30 – 16:00	Doris Stoppacher	MultiDark-Galaxies at median redshift: CMAS or CMENOS?
16:00 – 16:30	Anatoly Klypin	GLAM: a new method to generate thousands of mock galaxy catalogs

16:30 – 17:00      **Coffee Break**

17:00 – 17:30	Carlo Giocoli	Approximate Methods in Weak Lensing Light-Cone Simulations
17:30 – 18:00	Raul Abramo	What information is there in multi-tracer surveys?
18:00 – 18:30	Gabriela Satie	Bispectrum forecasts with combined photometric and spectroscopic surveys

### Tuesday Nov. 21<sup>th</sup>: Lecture Room

10:00 – 10:30	Joyce Byun	Towards precision cosmology with the LSS bispectrum
11:00 – 11:30	Sergio de Armas	Obtaining the Baryonic and DM power spectrum using certain approximations on the evolution of BAO
11:30 – 12:00	<i>Coffee Break</i>	
12:00 – 12:30	Siddhartha Gurung	The Large Scale Structure of the Universe traced by high redshift Lyman-alpha emitters
12:30 – 13:00	Alvaro Orsi	The impact of Galaxy Formation on cosmological analysis of the Large Scale Structure
13:00 – 13:30	Fabio Zandanel	Galaxy clusters mock catalogues from N-body simulations: eROSITA and other applications

13:30 – 15:00      **Lunch**

15:00 – 15:30	Antonio Montero-Dorta	A comprehensive study on galaxy assembly bias: results and prospects
15:30 – 16:00	Anna Niemiec	Stellar-to-halo mass relation of cluster galaxies
16:00 – 16:30	Eric Jullo	Lensing and galaxy clustering combined to test gravity
16:30 – 17:00	<i>Coffee Break</i>	
17:00 – 17:30	Johan Comparat	Stellar population properties for 2 million galaxies from SDSS DR14 and DEEP2 DR4 from full spectral fitting
17:30 – 18:00	Heidi Lietzen	The greatest wall of the Universe

### Wednesday Nov. 22<sup>th</sup> Morning Session: Lecture Room

10:00 – 11:00	Radek Wojtak	Two new directions in testing the standard cosmological framework: redshift remapping, comparing fully GR and Newtonian cosmological simulations
11:00 – 11:30	Ben Metcalf	Strong lensing simulations
11:30 – 12:00	<i>Coffee Break</i>	
12:30 – 13:00	Franco Albareti	Gravitational and thermal effects on massive scalar fields due to quantum corrections
13:00 – 13:30	Sergey Pilipenko	Pushing down the low-mass halo concentration frontier with the Lomonosov cosmological simulations

13:30 – 15:00      **Lunch**

15:00 – 15:30	Ginevra Favole	Modeling the clustering properties of emission line galaxies
15:30 – 16:30	Discussion chair by Francisco Prada	Review on new simulation needs
16:30 – 17:00	<i>Coffee Break</i>	
17:00 – 18:00	All	Group Meetings

### Thursday Nov. 23<sup>th</sup> Morning & Afternoon Sessions: Group meeting at Meeting Room

10:30 – 11:30	Salvador García & Sergio Ramirez	Machine/Deep Learning and Big Data
11:30 – 12:00	<i>Coffee Break</i>	
12:00 – 12:30	All	Discussion on Big Data Cosmology
12:30 – 18:00	All	Group Meetings

### Friday Nov. 24<sup>th</sup> Morning Session: Group meeting at Meeting Room

10:00 – 18:00	All	Group Meetings
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## **Participant List**

Ginevra Favole, European Space Astronomy Center, Madrid, Spain  
Raul Abramo (remote), Instituto de Física, Universidade de Sao Paulo, Brasil  
Gabriela Satie (remote), Instituto de Física, Universidade de Sao Paulo, Brasil  
Heidi Lietzen, Tartu Observatory, Estonia  
Ben Metcalf (remote), University of Bologna, Italy  
Sergio de Armas, Instituto de Astrofísica de Canarias, Spain  
Antonio Montero-Dorta, Instituto de Física, Universidade de Sao Paulo, Brasil  
Joyce Byun, Sussex University, U.K.  
Carlo Giocoli (very probably in person, eventually remotely), University of Bologna, Italy  
Johan Comparat (remote), MPE-Garching, Germany  
Eric Jullo (remote), LAM-Marseille, France  
Sergio Rodríguez-Torres, Universidad Autónoma de Madrid, Spain  
Anatoly Klypin, New Mexico State University, USA  
Radek Wojtak, DARK, Copenhagen, Denmark  
Franco Albareti, Instituto de Física Teórica UAM-CSIC, Madrid, Spain  
Francisco Prada, Instituto de Astrofísica de Andalucía CSIC, Granada, Spain  
Alvaro Orsi, CEFCA, Teruel, Spain  
Carlos Hernandez-Monteagudo, CEFCA, Teruel, Spain  
Doris Stoppacher, Instituto de Física Teórica UAM-CSIC, Madrid, Spain  
Sergey Pilipenko, Lebedev Physical Institute, Moscow, Russia  
Fabio Zandanel (remote), GRAPPA, Amsterdam, The Netherlands  
Siddhartha Gurung, CEFCA, Teruel, Spain  
Anna Niemiec, LAM-Marseille, France  
Salvador García, Department of Computer Science and Artificial Intelligence, Universidad de Granada  
Sergio Ramírez, Department of Computer Science and Artificial Intelligence, Universidad de Granada

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