# Monday

**9h00** - Welcome messages
*Session: Bayes (Chair: Eric Feigelson)*
**9h20** – The Advantages of "Shrinkage Estimates" in Astronomy –  David van Dyk
**10h05** – Bayesian model comparison in cosmology –  Daniel Mortlock
**10h25** – Coffee break
*Session: Bayes (Chair: Ben Wandelt)*
**10h50** – Nonparametric estimation and measurement errors –  Aurore Delaigle
**11h35** – Phase-space reconstruction of the cosmological large scale structure –  Francisco-Shu Kitaura
**11h55** – What we talk about when we talk about fields –  Ewan Cameron
**12h15** – Lunch
*Session: CMB (Chair: Licia Verde)*
**14h00** – Cosmic Microwave Background –  Graça Rocha
**14h45** – Detection of B-mode polarization at at degree angular scales using BICEP2 – Denis Barkats
**15h25** – Spin scale-discretised wavelets on the sphere for the analysis of CMB polarization – Jason McEwen
**15h45** –  Coffee break
*Session: CMB (Chair: Graca Rocha)*
**16h15** – Anomalies –  Hiranya Peiris
**16h50** – Transforming Data into Science: Planck data and the CMB non-Gaussianity – Anna Mangilli
**17h10** – Applications of the Gaussian Kinematic Formula in Cosmology – Yabebal Fantaye
**17h30** – Detectability of multi-connected topologies –  Ophélia Fabre
**17h50** – Cosmology with photometric quasars –  Boris Leistedt
**18h10** – Session ends
*18h10 to 18h40 –  Meeting of the IAA Working Group on Cosmostatistics –  Hosted by Rafael de Souza*

# Tuesday

*Session: Bayes (Chair: Hiranya Peiris)*
**9h00** – Massive parameter estimation – Benjamin Wandelt
**9h45** – Bayesian Photometric Redshifts v2.0 – Txitxo Benítez
**10h20**  Coffee break
*Session: Weak-lensing (Chair: Joseph Hilbe)*
**10h50** – Statistical challenges in weak lensing cosmology – Masahiro Takada
**11h35** – The Potential of Likelihood-Free Inference of Cosmological Parameters with Weak Lensing Data
 – Michael Vespe
**11h55** – The probability distribution of ellipticity: implications for weak lensing measurement – Massimo Viola
**12h15**  Lunch
*Session: Large Scale Structure (Chair: Mike Hobson)*
**14h00** – Precision cosmology, accuracy cosmology and statistical cosmology – Licia Verde
**14h45** – Errors on errors - estimating cosmological parameter§ covariance – Benjamin Joachimi
**15h05** – Bayesian large-scale structure inference: initial conditions and cosmic voids – Florent Leclercq
**15h25** – Marked point processes for morpho-statistical characterization of the cosmic web – Radu Stoica
**15h45**  Coffee break
*Session: Large Scale Structure (Chair: Konrad Kuijken)*
**16h10** – Low/High Redshift Classification of Emission Line Galaxies in the HETDEX survey – Viviana Acquaviva
**16h30** – Distribution of maximal luminosity of galaxies in the Sloan Digital Sky Survey – Eniko Regos
**16h50** – Bootstrap: a valid alternative for clustering analyses? – Pablo Arnalte-Mur
**17h10** – Detection of a Supervoid Aligned with the Cold Spot of the Cosmic Microwave Background – András Kovács
**17h30** – Sufficient observables for galaxy surveys – Julien Carron
**17h50** – Improved distance measurements with reconstructed WiggleZ – Eyal Kazin
**18h10** – Session ends
*19h30 – From Genes to Stars: the Fourth Paradigm of Science – Public lecture at Academia das Ciências de Lisboa – Alex Szalay*

# Wednesday

*Session: Data (Chair: Mario Santos)*
**9h00** – Statistics of Fields – Sabino Matarrese
**9h45** – Machine-learning in astronomy – Mike Hobson
**10h20** Coffee break
*Session: Data (Chair: Sabino Matarrese)*
**10h50** – Overwhelmingly large datasets – Alex Szalay
**11h35** – Machine Learning in Astronomy – Lise du Buisson
**11h55** – Euclid space mission: a cosmological challenge for the next 15 years – Roberto Scaramella
**12h15** Lunch
*Session: Sparsity (Chair: Alex Szalay)*
**14h00** – Sparsity – Jalal Fadili
**14h45** – Estimating the distribution of Galaxy Morphologies – Giuseppe Vinci
**15h05** – PURIFY: a new approach to radio-interferometric imaging – Yves Wiaux
**15h25** – PRISM: Sparse Recovery of the Primordial Power Spectrum – Paniez Paykari
**15h45** Coffee break
*Session: Statistics (Chair: Jalal Fadili)*
**16h15** – Sparsity-based CMB reconstruction – Jérôme Bobin
**16h50** – Maximum-likelihood determination of the galaxy LF, evolution and selection function – Jonathan Loveday
**17h10** – Transformatively Taming Spatial Statistics – Mark Neyrinck
**17h30** – Clipping the Galaxy Power Spectrum in GAMA – Fergus Simpson
**17h50** – How accurate are measurements of primordial non-Gaussianity parameters from large-scale structure? – Nina Roth
**18h10** – Session ends
**18h10 to 18h40** – Poster session
*20h00 – Conference dinner at Restaurante Zambeze*

# Thursday

*Session: Radio (Chair: Masahiro Takada)*
**9h00** – 21cm Cosmology – Mario Santos
**9h45** – Beyond confusion: A Bayesian P(D) analysis of the Deepest Radio Survey – Jasper Wall
**10h05** – Bayesian Inference for Radio Observations (BIRO): A new technique for simultaneously estimating instrumental errors and science parameters directly from radio visibility data – Michelle Knights
**10h25** Coffee break
*Session: Supernovae (Chair: Anais Rassat)*
**11h00** – Supernovae Cosmology – Mario Hamuy
**11h35** – Testing the consistency of different supernova surveys – Natallia Karpenka
**11h55** – Improved Kernel Principal Component Analysis for Supernova Photometric Classification – Emille Ishida
**12h15** Lunch
*Session: Joint probes (Chair: Enn Saar)*
**14h00** – Combining Probes – Anais Rassat
**14h45** – Cross Correlation between Astrophysical and Cosmological Datasets: Precision of Covariance Estimation and Impact on the Signal Detection Significance – Federico Bianchini
**15h05** – Information Gains from Cosmic Microwave Background Experiments – Sebastian Seehars
**15h25** – How well can the evolution of the scale factor be reconstructed by the current data?– Sandro Vitenti
**15h45** Coffee break
*Session (Chair: Jean-Luc Starck)*
**16h10** – Cosmology with photometric surveys – an update on the Dark Energy Survey – Filipe Abdalla
**16h30** – Statistics and the Future of Astronomy – Joseph Hilbe
**16h50** – Closing remarks from a Cosmologist – Andrew Jaffe
**17h10** – Symposium closes