Euclid-France Theory & Likelihood workshop 2022

Organizers: S. Codis, V. Pettorino, I. Tutusaus, F. Vernizzi

Introduction

Stéphanie Escoffier

IAP, 28 novembre 2022

Theory & Likehood Workshop

- The launch of Euclid is coming soon, with a launch by a Falcon 9 in July 2023!
- The preparation of the community on the theory & likelihood aspects is crucial, and this is why this workshop is not limited to Euclid, but also covers other cosmological programs.
- The French community has a major contribution on theory & likelihood activities, and the objectives of this workshop are:
  - to provide a forum for young researchers,
  - to promote scientific activities for Euclid and to prepare the next call for DR1 Key Projects.

Theory & Likehood Workshop

- The launch of Euclid is coming soon, with a launch by a Falcon 9 in July 2023!
- The preparation of the community on the theory & likelihood aspects is crucial, and this is why this workshop is not limited to Euclid, but also covers other cosmological programs.
- The French community has a major contribution on theory & likelihood activities, and the objectives of this workshop are:
  - to provide a forum for young researchers,
  - to promote scientific activities for Euclid and to prepare the next call for DR1 Key Projects.

- Define our needs for the future:
  - Need for dedicated workshops/tutorials for the more inexperienced?
  - Need to share tools?
  - Improve access to information?

Agenda

10:00 - 10:10	Welcome	François R. Bouchet
10:10 - 10:20	Introduction	Stephanie Escoffier
10:20 - 10:50	Euclid-likelihood and Euclid-Theory	Isaac Tutusaus
10:50 - 11:20	Precision modelling of neutrino impact on LSS	Petter Taule
11:20 - 11:50	Coffee break	
11:50 - 12:20	Tomographic Coupled Dark Energy with Euclid	Lisa Goh
12:20 - 12:50	Mixed Dark Matter constraints from KiDS-1000 and effects on S8 tension	Fabian Hervas Peters
12:50 - 14:20	Lunch break	
14:20 - 14:50	Galaxy clustering analysis with DESI	Pauline Zarrouk
14:50 - 15:20	UNIONS: The impact of systematic errors on weak-lensing peak counts	Emma Ayçoberry
15:20 - 15:50	SELFI enhanced: robustness to model misspecification and Euclid forecast	Florent Leclercq
15:50 - 16:20	Coffee break	
16:20 - 16:50	Testing the accuracy of likelihoods for cluster abundance cosmology	Constantin Payerne
16:50 - 17:20	Exploring the effects of primordial non-Gaussianity at galactic scales	Clément Stahl