

# Higher-Order Weak Lensing Statistics in Euclid: insights from pre-launch projects and DR1 plans

*mercredi 11 juin 2025 17:00 (20 minutes)*

I will provide an overview of higher-order weak lensing statistics and their relevance to the Euclid mission. The talk will draw on the results of the pre-launch Paper 2, which employed the Fisher formalism to explore the constraining power of these non-Gaussian statistics on cosmological parameters. Emphasis will be placed on the key lessons learned from this preparatory project, highlighting how it informs the development of robust methodologies for the analysis of the Data Release 1. I will conclude by outlining the plans for the Data Release 1, with a particular focus on the strategies for probing models beyond  $\Lambda$ CDM, which is the core of my current research activities.

**Orateur:** BOUCHÈ, Filippo (Scuola Superiore Meridionale & INFN Sez. Napoli)

**Classification de Session:** COLOURS Workshop