

Precision cosmology: challenges and opportunities (No 1727)

🕒 12:30 - 13:00 🏆 Prize Winner 🔗 Lodewijk Woltjer lecture

[Licia Verde](#)¹

¹ Instituto de Ciencias del Cosmos (ICC), Universidad de barcelona

Over the past 20 years cosmology has made the transition to a precision science.

The standard cosmological model has been established and its parameters are now measured with unprecedented precision. This model successfully describes observations from widely different epochs of the Universe, from primordial nucleosynthesis all the way to the present day.

However, there is a big difference between modelling and understanding. The next decade will see the era of large surveys; a large coordinated effort of the scientific community in the field is on-going to map the cosmos producing an exponentially growing amount of data. I will discuss challenges and opportunities of these developments.