



When big meets small: the connection between particle physics and cosmology

Physical cosmology is the study of the structure and dynamics of the universe on the largest scales. Particle physics, on the other hand, is the study of elementary particles and their behaviours on subatomic scales. Yet, these two seemingly disconnected branches of physics come together in the hot and dense environment in the first moments after the birth of the universe. In this talk, I will explain how the physics of the tiniest building blocks of nature is inextricably intertwined with phenomena on the largest scales in the observable universe.



Yvonne Wong

Yvonne Wong obtained her BSc (Hons) and PhD in Theoretical Physics from the University of Melbourne, Australia, in 1998 and 2001 respectively. After several postdoctoral positions in the US and Europe, including at DESY (Hamburg), Max Planck Institute for Physics (Munich), and CERN (Geneva), she was named Junior Professor at RWTH Aachen, Germany in 2009. She returned to Australia in 2013 and is currently an Associate Professor at the University of New South Wales, Sydney. Her research primarily concerns using observations of the Universe to probe fundamental physics.

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