

# SCGP Weekly Talk: Ana Achucarro

Tuesday, February 6 · 1:15 – 2:15pm

Location: SCGP 102

Title: Cosmic inflation, reloaded

Speaker: Ana Achucarro

Abstract: Inflation is the currently favoured explanation for the origin of the primordial density fluctuations that seeded all large-scale structures in the universe. It turns the birth of the universe into a “cosmological collider” event whose products are still imprinted in the sky today and can be detected with telescopes, provided we know what to look for. The precise connection of inflation and particle physics is still pending, after decades, but now also its connection to quantum gravity is posing new and unexpected challenges. After a general introduction, I will discuss some recent, surprising insights into inflation scenarios involving multiple fields with curved field space geometries (such as moduli).