

# Gauge Fields in Inflation, Origin of Matter, and Gravitational Waves

*lundi 17 mai 2021 16:30 (30 minutes)*

Modern cosmology inevitably involves particle physics beyond the Standard Model to explain long-standing puzzles: the origin of matter asymmetry, nature of dark matter and cosmic inflation. In this talk, I will explain that gauge fields in inflation can possibly solve and relate these seemingly unrelated mysteries of modern cosmology. As a smoking gun, this setup has robust observable signatures for the gravitational background to be probed by future CMB missions and laser interferometer detectors.

**Orateur:** MALEKNEJAD, Azadeh