

Baryogenesis via Particle–Antiparticle Oscillations

Thursday, 31 May 2018 17:30 (20 minutes)

Our Universe has more matter than antimatter and we cannot explain this asymmetry within the Standard Model. CP violation is crucial to explain the baryon asymmetry of the Universe. We observe CP violation in the SM in neutral meson oscillations. Can similar (but beyond the SM) particle–antiparticle oscillations in the early Universe generate the baryon asymmetry? I will show “Yes, they can!” and give a specific new physics model as an example.

E-mail

ipekseyda@gmail.com

Primary author: Dr IPEK, Seyda (University of California Irvine)

Co-author: Prof. MARCH-RUSSELL, John (University of Oxford)

Presenter: Dr IPEK, Seyda (University of California Irvine)

Session Classification: PPHI / TSEI

Track Classification: TSEI