

## Leptogenesis via varying Weinberg operator

*Tuesday, 20 June 2017 15:40 (20 minutes)*

This talk will focus on a totally new mechanism of leptogenesis we proposed recently. It requires only the Weinberg operator and a phase transition at a sufficiently high scale. While the Weinberg operator is used to generate light neutrino masses, phase transition is strongly motivated by the breaking of some underlying symmetries, such as B-L symmetry and flavour symmetries. During the phase transition, the coupling of Weinberg operator is time-dependent, and the lepton asymmetry is generated by the interference of Weinberg operator at different times. Any heavy BSM particles, e.g., right-handed neutrinos, are not necessary in this mechanism.

**Primary author:** Dr ZHOU, Ye-Ling (IPPP, Durham University)

**Presenter:** Dr ZHOU, Ye-Ling (IPPP, Durham University)

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