



Contribution ID: 15

Type: **not specified**

Stochastic inflation and primordial black holes

Monday 13 May 2024 16:20 (20 minutes)

Quantum fluctuations from cosmic inflation give rise to the macroscopic structures of the universe. The strongest fluctuations collapse into primordial black holes, a dark matter candidate. Stochastic inflation is a tool to compute the fluctuation statistics non-perturbatively, needed for accurate black hole predictions. I discuss recent progress in these computations, their numerical implementation and analytical approximations, and the implications for black hole abundance in single-field models of inflation.

Presenter: TOMBERG, Eemeli (Lancaster University)