ID de Contribution: **6** Type: **Non spécifié**

Sebastien Renaux-Petel: Multifield stochastic inflation in phase space: a manifestly covariant theory and its first principle derivation.

mardi 10 novembre 2020 10:45 (45 minutes)

In this talk based on arXiv:2008.07497 (from Lucas Pinol, Yuichiro Tada and myself), after an introduction to stochastic inflation, I explain the difficulties and the solution to formulate this theory in a manner that respects covariance under field redefinitions. I do so in the general framework of multifield inflation with a curved field space, taking into account the coupling to gravity as well as the full phase space in the Hamiltonian language. Moreover, I show how to rigorously derive the corresponding Langevin equations using tools of nonequilibrium quantum field theory.