

The Non-linear early Universe

Wednesday 1 May 2024 10:30 (1 hour)

We review “Lattice Cosmology” techniques as a method to solve non-linear dynamics of interactive fields in an expanding Universe. As a demonstration we apply these ideas to solve two different problems of early Universe cosmology: i) the non-linear dynamics of axion inflation when backreaction of the produced gauge field becomes relevant, and ii) gravitational wave emission from (global and local) cosmic string loop dynamics

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