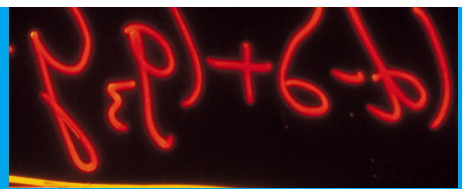
DESY
Particle and Astroparticle Physics Colloquium

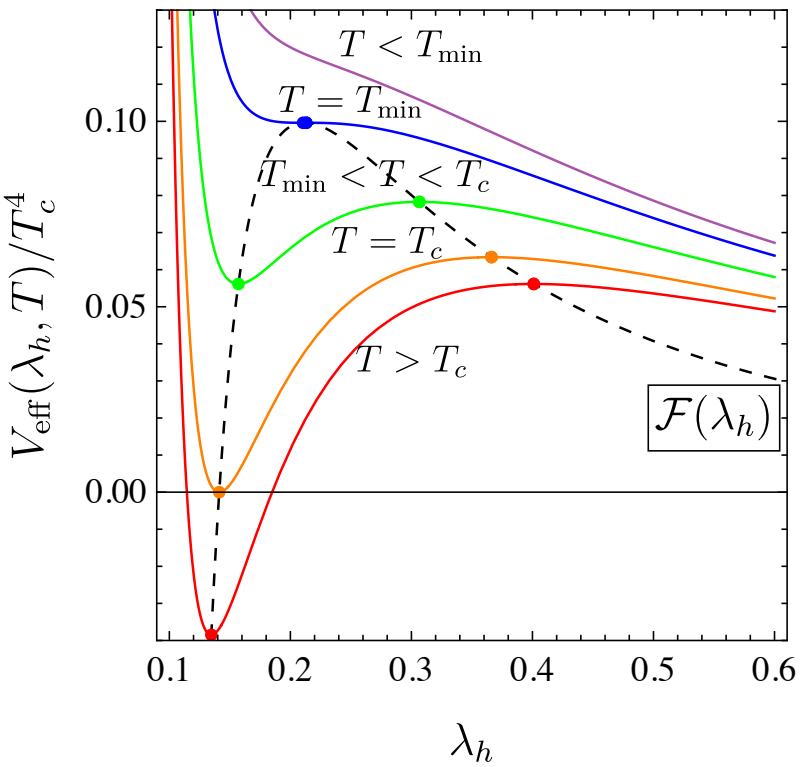


Exploring the non-equilibrium early Universe: From gravitational waves to spectral distortions.

Tuesday, 24 January, 2023
Auditorium & Webcast 16:00 h

Pedro Schwaller (University of Mainz)

Much remains unknown about the early Universe before the emission of the CMB and Nucleosynthesis. It is usually assumed to be thermalised, homogeneous and isotropic, with only small fluctuations. However many new physics scenarios violate these assumptions: Phase transitions or displaced scalar field represent large deviations from thermal equilibrium, while topological defects like strings and domain walls represent large anisotropies. This talk will give an overview of these phenomena, and discuss their observable imprint in the form of gravitational waves and of CMB spectral distortions. Some recent progress in the study of phase transitions in strongly coupled theories will also be discussed.



Please note:

This is a HYBRID colloquium!

Meeting ID: 996 1652 8733
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