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Workshop or Conference

Jeudi 6 Juin 2019, 09 :00
IPHT, Amphi Claude Bloch, Bât. 774
Domaines : physics

Titre : *24th Itzykson Conference (June 05-07, 2019) : Effective Field Theory in Cosmology, Gravity and Particle Physics*

Orateur : **... (IPhT)**

Résumé : *The Itzykson Meeting is held every year in Saclay to honour the memory of Claude Itzykson.*

Effective field theory is one of the deepest and most useful guiding principles in physics. Its tools and methods allow one to study the universal aspects of entire classes of unknown microscopic models, with their main features being captured by symmetries and few relevant parameters of the effective degrees of freedom. Because of its universality, it finds applications across all scale in physics : from super-Hubble scales all the way to the Planck length. It is successfully applied to cosmology to describe the early cosmic inflation, the current cosmic acceleration, the dynamics of the large scale structure and the dark matter. Its methods have found recent applications in the theory of gravitational wave emission by binary inspirals, and in the new multimessanger astrophysics : new and conceptually compelling ways to perform calculations and predictions are being developed by making contact with the methods of scattering amplitudes of particle physicists.

One of the goals of the conference is to bring together experts working with Effective Field Theories in all these fields, in order to exchange ideas and foster new insights and techniques.

Website : https ://indico.in2p3.fr/event/18200/
Scient. Organisers : Brando Bellazzini, John Joseph Carrasco and Filippo Vernizzi.
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