12th International Conference on the Exact Renormalization Group 2024 (ERG2024)



Contribution ID: 21

Type: not specified

Finite formulation of QFT, naturalness, and the effective action

Tuesday 24 September 2024 09:00 (40 minutes)

I will provide an overview of the finite formulation of Quantum Field Theory (QFT) using the Callan-Symanzik method. This method enables the calculation of correlation functions without encountering intermediate divergences. I will discuss the impact of this technique on the hierarchy problem and naturalness, as well as its application to the quantum effective action in both renormalizable and non-renormalizable theories.

Presenter: SHAPOSHNIKOV, Mikhail (EPFL - Ecole Polytechnique Federale Lausanne (CH))