

PRISMA+ Colloquium

Nov. 8, 2023 at 1 p.m.
Lorentz-Raum, 05-127, Staudingerweg 7

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Resurgence and the power of perturbation theory

Perturbation theory is one of the most important analytical tool in quantum mechanics and quantum field theory, but it is known to give rise to divergent asymptotic series. How can we then make sense out of it? Resurgence seems to be a possible answer. After an historical detour on the study of the asymptotic behaviour of perturbation theory, we introduce basic notions of resurgence and show some application in quantum mechanics and quantum field theory.