

Bethe Colloquium

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Decoding the Path Integral: Resurgent Asymptotics and Extreme Quantum Field Theory

There are several important conceptual and computational questions concerning path integrals, which have recently been approached from new perspectives motivated by „resurgent asymptotics“, a novel mathematical formalism that seeks to unify perturbative and non-perturbative physics. I will review the basic ideas behind the connections between resurgent asymptotics and physics, ranging from differential equations to phase transitions and QFT. I will also discuss the reconstruction problem: how to optimally reconstruct non-perturbative information from a finite amount of perturbative information.

Zoom meeting

Thursday, February 4, 2021, at 16 c.t.

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