Contribution ID: **3**   Type: **Talk**

Solving the sign problem by going with the flow

Tuesday 2 August 2016 11:50 (25 minutes)

We discuss an approach to solve the sign problem based on deforming the region of integration in the path integral from real fields to a manifold in complex space. It generalizes the"Lefschetz thimble" approach that received much attention lately. We discuss principles through a simple geometrical picture, discuss algorithm features required to make the idea work and present examples in simple models ranging from 0+1 D fermionic models to 3+1D bosonic models and real time dynamics.

Author: Prof. BEDAQUE, Paulo (University of Maryland)

Presenter: Prof. BEDAQUE, Paulo (University of Maryland)

Session Classification: Tuesday AM

Track Classification: Quantum Field Theories of dense, cold matter