SEMPARIS – Séminaires en région parisienne

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Forum de Physique Statistique @ ENS

Jeudi 1 Juin 2023, 12 :30
LPENS, L378
Domaines : cond-mat.stat-mech

Titre : *Variational method for low dimensional quantum/statistical field theories*

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Résumé : *I will explain why the variational method is particularly well suited to solve non-integrable quantum (statistical) field theories in 1+1 (2) dimensions. I will then specialize to a variational ansatz obtained from a continuum limit of tensor network states, which, with an additional twist, allows to find N-point correlation functions to essentially arbitrary precision for a large class of bosonic QFT/SFT. I will ultimately discuss the tremendous difficulties in extending this approach to higher dimensions.*