

Domain Wall and Overlap Fermions in 2+1D

Tuesday, 4 August 2020 16:00 (20 minutes)

Layered systems such as graphene have become an important area of investigation. Within the broader programme of investigating critical phenomena in such systems, we look at different mass configurations for domain wall fermions and overlap fermions in 2+1D. The equivalence between formulations is reviewed, and formulations for the condensate and susceptibility are given. Locality of fermion operators is required for the recovery of $U(2)$ symmetry and is demonstrated with numerical experiments. Further aspects are also considered.

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Session Classification: Physics Beyond the Standard Model

Track Classification: Applications beyond QCD