Contribution ID: **305** Type: **Poster**

Variance reduction with normalizing flows

Tuesday 4 November 2025 18:00 (1h 30m)

Normalizing flows provide a framework to learn statistically exact machine-learned maps between different lattice field theories. Flows constructed to map from QCD to the same theory with a (possibly localized) operator insertion provide a general tool to construct unbiased reduced-variance estimators for lattice QCD correlation functions. Building on previous applications to Feynman-Hellmann calculations, we extend this approach to include improved computations of two-point and three-point functions. We present preliminary results of several applications of this approach.

Parallel Session (for talks only)

Authors: HACKETT, Daniel; KANWAR, Gurtej (University of Edinburgh)

Presenters: HACKETT, Daniel; KANWAR, Gurtej (University of Edinburgh)

Session Classification: Poster session