



Contribution ID: 186

Type: **Poster**

## **E3: Field-Transformation HMC algorithm**

*Wednesday, 28 July 2021 15:45 (15 minutes)*

We report our implementation of the Field-Transformation HMC algorithm following Luescher's paper "Trivializing maps, the Wilson flow and the HMC algorithm". This algorithm has similar effects as the Riemannian Manifold HMC (RMHMC) algorithm. Comparing with the original HMC algorithm, improvement on the topology tunneling rate is observed when generating the pure gauge configurations.

**Primary author:** JIN, Luchang

**Presenter:** JIN, Luchang

**Session Classification:** Poster

**Track Classification:** Algorithms (including Machine Learning, Quantum Computing, Tensor Networks)