



Contribution ID: 23

Type: **Poster**

Renormalization constants of the lattice energy momentum tensor using the gradient flow

Monday 1 August 2016 17:25 (2h 5m)

We present an update about our program for the non perturbative renormalization of the energy momentum tensor. Our strategy is based on probing suitable lattice Ward identities with observables computed along the gradient flow. This set of identities exhibits many interesting qualities, resulting from the UV finiteness of flowed composite operators, and can be used to measure the renormalization constants of the energy momentum tensor. We apply this method for a $SU(3)$ Yang-Mills theory on the lattice, and report our numerical results.

Authors: Dr PATELLA, Agostino (CERN and Plymouth University); Dr RAGO, Antonio (School of Computing, Electronics and Mathematics Plymouth University); Mr CAPPONI, Francesco (Plymouth University); Prof. DEL DEBBIO, Luigi (Edinburgh)

Presenter: Mr CAPPONI, Francesco (Plymouth University)

Session Classification: Poster session

Track Classification: Transport properties and probes