



Contribution ID: 261

Type: **Poster**

## **Gradient flow observables and boundary $O(a)$ improvement of the Schroedinger functional**

*Tuesday, July 26, 2016 8:00 PM (1 hour)*

The gradient flow provides a new class of renormalized observables which can be measured with high precision in lattice simulations. In principle this allows to improve lattice actions a la Symanzik by requiring such observables to take their continuum values already at finite lattice spacing. At lowest order of perturbation theory we here try to identify such improvement conditions for the  $O(a)$  counterterm at the Schroedinger functional boundaries. We study the action density,  $E(t,x)$ , separately for colour electric and magnetic components and with different discretizations of the observable and the flow.

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**Session Classification:** Poster

**Track Classification:** Theoretical Developments