



Contribution ID: 17

Type: **not specified**

Dynamics on the edge: charge fractionalization and anyonic exclusion

Thursday, 7 November 2019 12:10 (50 minutes)

Equilibration of isolated quantum systems has attracted much attention recently. Due to their integrability, one-dimensional systems often equilibrate towards a non-thermal steady state. In coupled quantum Hall edge states, the approach towards such a non-equilibrium steady state can be understood in terms of charge fractionalization, i.e. the decomposition of injected charges into eigenmodes propagating at different velocities. The method of non-equilibrium bosonization allows to describe such equilibration, distinguishing the regimes of quasi-particle creation and local equilibration. Generalizing to anyons on fractional quantum Hall edges, steady state current fluctuations can be related to the probability of anyons excluding each other spatially.

Presenter: ROSENOW, Bernd (Leipzig U)