



Contribution ID: 40

Type: **Talk**

## Density of states approach with FFA for an effective Polyakov loop model at finite density

*Friday, 17 July 2015 17:30 (20 minutes)*

We study an effective theory for Polyakov loops at finite density (SU(3) spin model) using the density of states (DoS) method. We generalize a recently developed variant of DoS, the so-called functional fit approach (FFA) for systems with continuous degrees of freedom (compare also the related talk by P. Törek). We show that the density of states can be computed with sufficiently high accuracy and we compare our physical observables to the results of a reference simulation of the model in a dual simulation.

**Primary authors:** Prof. GATTRINGER, Christof (University of Graz); Mr GIULIANI, Mario (University of Graz); Mr TÖREK, Pascal (University of Graz)

**Co-author:** Mr LEHMANN, Alexander (Humboldt University Berlin)

**Presenter:** Mr GIULIANI, Mario (University of Graz)

**Session Classification:** Nonzero Temperature and Density

**Track Classification:** Nonzero Temperature and Density