



Contribution ID: 58

Type: **Talk**

## The density of states method applied to the Ising model with an imaginary magnetic field

*Tuesday 2 August 2016 09:45 (25 minutes)*

Above the Curie temperature, the Ising model partition function can vanish under the effect of an imaginary magnetic field, as first shown by Lee and Yang. This system has a severe sign problem. We study it numerically, using the density of states method. In particular, we consider how the computer effort scales with the system size.

**Author:** Dr DE FORCRAND, Philippe (ETH Zurich & CERN)

**Co-author:** Mr RINDLISBACHER, Tobias (ETH Zürich)

**Presenter:** Dr DE FORCRAND, Philippe (ETH Zurich & CERN)

**Session Classification:** Tuesday AM

**Track Classification:** Quantum Field Theories of dense, cold matter