## XXXII International (ONLINE) Workshop on High Energy Physics "Hot problems of Strong Interactions"

Contribution ID : 11 Type : not specified

## Magnetic susceptibility of QCD matter

понедельник, 9 ноября 2020 г. 20:30 (30)

In this talk I will report on a new method to determine the magnetic susceptibility of thermal QCD matter on the lattice. The method employs current-current correlators evaluated at zero magnetic field, thereby circumventing problems of previous approaches related to magnetic flux quantization. Using the susceptibility, the equation of state at low magnetic fields is reconstructed and parameterized in a manner useful for model approaches. If time allows, a decomposition of the susceptibility into spin- and orbital angular momentum-related contributions will be discussed.

**Primary author(s):** Prof. ENDRODI, Gergely (University of Bielefeld); Prof. BALI, Gunnar (University of Regensburg); Dr PIEMONTE, Stefano (University of Regensburg)

**Presenter(s):** Prof. ENDRODI, Gergely (University of Bielefeld)

**Session Classification :** Session 2: QCD phase diagram under strong external magnetic field (NOTE! late starting time)

Track Classification: QCD phase diagram under strong external magnetic field