



Contribution ID: 27

Type: **Talk**

## **Spatially inhomogeneous confinement/deconfinement phase transition in accelerated gluodynamics**

*Friday 7 November 2025 17:20 (20 minutes)*

Quark-gluon plasma created in heavy-ion collision experiments is subjected to huge acceleration which might modify QCD properties. The toy model which allows to study the influence of acceleration on a strongly interacting system is QCD in the Rindler space. In addition the Rindler space allows to consider QCD properties close to the event horizon of a black hole.

In this report the first results of our study of gluodynamics in the Rindler space are presented. We consider the case of weak acceleration when the system under investigation is far from the event horizon. We found spatially inhomogeneous confinement/deconfinement phase transition.

The space position of this transition can be well described by the Tolman-Ehrenfest law.

### **Parallel Session (for talks only)**

QCD at nonzero temperature and density

**Authors:** Dr ROENKO, Artem (JINR, BLTP); Dr DEY, Jayanta (JINR); BRAGUTA, Victor (JINR); GOY, Vladimir (Institut Denis Poisson, Tours)

**Presenter:** BRAGUTA, Victor (JINR)

**Session Classification:** QCD at nonzero temperature and density