



Contribution ID: 123

Type: **Poster Presentation**

The physics of the fragmentation region in heavy-ion collisions

The “fragmentation region”, or far forward region, of high-energy heavy-ion collisions provides an opportunity to study the quark-gluon plasma at very high densities. This region of phase space has not been studied in detail. We present a simple model to aid in the development of intuition for the physics of the fragmentation region, including the nature of both the highly boosted matter and the resultant radiation. We find that the fragmentation region contains two separate fluids during the early stages of the collision and we present preliminary thermodynamical results.

Apply to be considered for a student ; award (Yes / No)?

No

Level for award;(Hons, MSc, PhD, N/A)?

N/A

Primary authors: KOLBE, Isobel (University of Cape Town); Dr LUSHOZI, Mawande (Institute of Nuclear Theory); Prof. MCLERRAN, Larry (Institute for Nuclear Theory); Prof. YU, Gongming (Harbin Engineering University)

Presenter: KOLBE, Isobel (University of Cape Town)

Session Classification: Poster Session

Track Classification: Track B - Nuclear, Particle and Radiation Physics