

## Do quarkonia thermalize at the LHC?

*Wednesday, 16 November 2022 15:20 (20)*

We analyze the relative yields of different bottomonia and charmonia states produced in Pb+Pb collisions at LHC, within an ideal hadron resonance gas framework. The underlying assumption is the early thermalization and subsequent freezeout of these heavy hadrons resulting in their chemical freezeout at a temperature, significantly higher than that of light and strange hadrons. The systematic dependence of the freezeout temperature on the collision energy and centrality is investigated in detail.

**Primary author(s)** : SARKAR, Nachiketa (National Institute of Science Education and Research)

**Co-author(s)** : Mr KUMAR, Deekshit; BHADURI, Partha Pratim (Variable Energy Cyclotron Centre); JAISWAL, Amaresh Kumar

**Presenter(s)** : SARKAR, Nachiketa (National Institute of Science Education and Research)

**Session Classification** : Day 2: Session 3

**Track Classification** : Heavy flavor and Quarkonium production