Contribution ID: **17** Type: **not specified**

Study of Quarkonia Dissociation at finite magnetic field

The study investigates the behavior of heavy quarkonia in a hot and magnetized quark-gluon plasma. We incorporated the inverse magnetic catalysis (IMC) effect by modifying the Debye mass through magnetic-field-dependent effective masses. Our analysis yields the real and imaginary components of the heavy quark potential within this magnetized environment.

After evaluating the binding energy and decay width, we study the dissociation temperature of heavy quarkonia in the presence of a magnetic field.

Author: Dr NILIMA, Indrani (Banaras Hindu University (BHU))

Co-authors: Prof. SINGH, Bhartendu Kumar; Dr YOUSUF JAMAL, Mohammad (Indian Institute of Technology Goa)

Track Classification: 3. Hard probes - jets and electromagnetic probes, heavy flavor, quarkonia