

Theoretical Physics Seminars

Heavy quarkonia in a strong magnetic field

Speaker: Mr. Balbeer Singh

From: Physical Research Laboratory, Ahmedabad.

When: June 20 , 2017 Tuesday 4:00 pm

Place: Room No. 469

Quark-gluon plasma is the state of strongly interacting matter where quarks and gluons are deconfined and which is created in RHIC @ BNL and LHC @ CERN. In heavy ion collisions, a very strong magnetic field is also created in the non-central collision of ions which is strong in the initial state of the collision and rapidly decreases with time. The presence of this magnetic field affects the QCD plasma screening which leads to observable changes in QGP properties. One of these is the heavy quarkonia potential and dissociation of quarkonia. In this seminar, I will discuss how the quarkonium potential gets modified in a magnetized quark-gluon plasma. I will also discuss the Debye screening in the lowest Landau level approximation and the quarkonium decay width in the strong field limit.

All are welcome