

ICTS Seminar

- Title : Gauge Invariant Mass of Vector Bosons: Some Implications
- Speaker : Ishita Dutta Choudhury, S N Bose National Centre for Basic Sciences, Kolkata
- Date : Thursday, November 24, 2016
- Time : 3:00 PM
- Venue : Nambu Discussion Room(left), ICTS Campus, Bangalore
- Abstract : My presentation will consist of two different parts. Firstly, I shall describe a low energy, effective field theory of superconductivity in which a topological mass term is radiatively induced in one loop effective action by coupling an antisymmetric tensor field with the vorticity current of charged Dirac fermions in the Lagrangian. In the non-relativistic limit, the static effective potential shows a linear, always attractive term between two electrons. In the second part, I shall talk about the Anomalous Chromomagnetic Moment (ACM) of the quarks, the dependence on a small, gauge invariant mass of the gluon. The results are plotted at two different momentum transfers, at $q^2 = -M^2 Z$ as well as at $q^2 = -m^2 t$.