Area Seminar

Title	Spectroscopic Properties of atoms/ions in the presence of screened inter-electron interaction.
Date and Time	25/04/2013 16:00:00
Speaker	Dr. Madhulita Das National Chemical Laboratory, Pune
Area	Theoretical Physics
Venue	Room No. 469
Abstract	We have theoretically studied the atomic structure and properties of multi-electron system in both weak and strong plasma environment using Debye and Ion-Sphere model, respectively. The Many-body method adapted for the computation is the Relativistic Coupled Cluster method to include e?ectively the relativistic and correlation effects in the calculations using Gaussian type orbital (GTO). In addition to nuclear screening effect, the plasma screening effect have been extended to electron-electron Coulomb interaction between the atomic electron of highly charged atomic/ionic systems embedded in plasma. The main focus is to analyze the in?uence of inter-electron screening effect on the spectroscopic properties of highly charged Lithium iso-electronic sequence with increasing plasma strength.