Séminaire Informel LIONS

Jeudi 17 Novembre à 11h, pce. 157, bât. 125

Dynamic phenomena for the charged clusters in electrolytes

JULIA CHIKINA

UMR 3299 CEA/CNRS SIS2M-LIONS, CEA Saclay, F-91191 Gif-sur Yvette, France E-mail: julia.chikina@cea.fr

The problem of solvent inhomogeneity in the vicinity of point-like charges is important for most effects involving charged clusters in the theory of polyelectrolytes. Discussed are resonance phenomena in electrolytes related to possible relative motion of the charged core and hydrate (solvate) shell of individual clusters. The resonances are shown to contain important information on the internal structure of clusters. Special attention is paid to the process of formation of a cluster associated mass in the solvent. It is also shown that finite solvent viscosity does not suppress completely the structure resonance.