

Disorder and Coulomb interactions

Rudolf Podgornik
University of Ljubljana, Slovenia

In my talk I will first present the effect of disorder, either annealed or quenched, on the idealisations assumed in the DLVO theory of colloid interactions. I will address the disorder in the dielectric response function, the disorder in the charge distribution as well as the disorder effects in the presence of counterions and salt. I will introduce the concept of anti-fragility in the case of Coulomb disorder effects and discuss some consequences and possible experiments.