



سمینار هفتگی گروه ماده چگال نرم

Two examples of forceless motion in low Reynolds number limit

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An external electric field, applied to a colloid mixture, can bring the charged colloidal particles into motion. In the first glance, the electric field is exerting a force on charged particles, and there is no complexity with colloid motion. However, the system of colloid with its neutralizing diffusive-layer, construct a neutral object which feels no net force at all. This means that the electric field brings particles into motion while exerting no net force on them. A similar phenomenon happens if we apply a temperature gradient to such a solution. Again, colloidal particles come into motion with no net force on them. In our Saturday seminar, we will discuss these sorts of motion, known as phoretic motion. Then, compare some theoretical predictions with experimental data.

زمان: شنبه 87/1/24 ، ساعت 15:30

مکان: آمفی تئاتر دانشکده فیزیک

قطب ماده چگال و سیستمهای پیچیده