



سمینار هفتگی گروه  
ماده چگال نرم

# Phase-Separation, Aggregation and Gelation in Short-ranged Attractive Colloids

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Using the image data from real-time confocal microscopy and photography aboard the International Space Station, we explore the general equilibrium phase behavior and kinetic arrest of attractive colloid-polymer mixtures. We observe a variety of morphologies, states and behaviors, from well-established diffusion-limited cluster aggregation, spinodal decomposition, and the formation of liquids, gases and solid-like gels. We present quantitative evidence, mapping our imaging results with those in molecular dynamics simulations, that the formation of gels is universally triggered by the onset of liquid-gas phase separation.

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قطب ماده چگال و سیستمهای پیچیده

برنامه سمینارهای گروه ماده چگال نرم در آدرس <http://physics.sharif.edu/softmatter> قابل مشاهده است.