

Students' Annual Seminar

Translationally invariant colloidal crystal templates

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We show that dynamic, feed-back controlled optical traps, whose positions depend on the instantaneous local configuration of particles in a pre-determined way, can stabilise colloidal particles in finite lattices of any given symmetry. Unlike in a static template, the crystal so formed is invariant under uniform translations and retains all possible zero energy modes. We demonstrate this *in silico* by stabilising the unstable two-dimensional square lattice in a model soft solid with isotropic interactions.

Thursday, Jan 25th 2018

04:00 PM (Tea/Coffee at 03:30 PM)

Seminar Hall, TIFR-H