Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Elastic Theory of Defects in Toroidal Crystals LUCA GIOMI, MARK BOWICK, Syracuse University — Crystalline assemblages of identical subunits packed together and elastically bent in the form of a torus have been found in the past ten years in a variety of systems of surprisingly different nature, such as viral capsids, self-assembled monolayers and carbon nanomaterials. We investigate the structural properties of toroidal crystals and we provide a unified description based on the elastic theory of defects in curved geometries.

Abstract APS

Date submitted: 14 Dec 2007 Electronic form version 1.4