

Abstract Submitted  
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**Elastic Theory of Defects in Toroidal Crystals** LUCA GIOMI,  
MARK BOWICK, Syracuse University — Crystalline assemblages of identical sub-  
units 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.

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