

Abstract Submitted  
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**Crystalline Particle Packings on Spheres**<sup>1</sup> YAPING JING, Iowa State University, ALEX TRAVESSET, Iowa State University and Ames lab — The problem of packing particles on spheres appears in several soft condensed matter systems such as the building of PMMA cages (Pickering emulsions or colloidosomes), the micropatterning of colloidal particles relevant for photonic crystals or the geometric structures of Clathrin cages responsible for the vesicular transport of cargo in cells, just to name a few. In this talk we show how the structural and mechanical properties of spherical crystals can be described analytically from continuum elastic models and discuss how the results are extended to describe other geometries as well.

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