## Abstract Submitted for the MAR05 Meeting of The American Physical Society

Shape transformation of viral capsids and HIV TOAN NGUYEN, ROBIJN BRUINSMA, WILLIAM GELBART, University of California, Los Angeles — We present a continuum description of the shape transformation of viral capsids. The cone-like HIV virus is shown to be an thermodynamic stable shape, intermediate between icosahedral and sphero-cylinder capsid shapes. A generalized Caspar-Klug classification is introduced to describe spherical, conical and cylinderical shapes of virus.

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