

Abstract Submitted  
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**Mean Field Theory of Foam Aging** OLIVIA HALT, University of Pennsylvania, RANDALL KAMIEN, University of Pennsylvania — We describe our work on the geometrical properties of a random foam as a function of the number of faces, based on Isotropic Plateau Polyhedra [1,2]. Analytic values of specific area, the stretching moment, and curvature can be obtained for these geometrical constructs. The expression for curvature is a ratio of the volume to the area of the foam cell. Focusing on this quantity will allow a better description of the coarsening of a foam. Conclusions from this mean field study will be discussed. [1] Glicksman M., *Phil. Mag.*, **85** (2005) 3. [2] Hilgenfeldt S., Kraynik A., Reinelt D., and Sullivan J. *Europhys. Lett.* **67** (2004) 484.

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