## Abstract Submitted for the MAR09 Meeting of The American Physical Society

Slow Stress-Relaxation of Thin Sheet Folds JENS FEDER, SIMON DE VILLIERS, ANDERS MALTHE-SORENSSEN, PGP and Department of Physics, University of Oslo — We measure the slowly relaxing force required to maintain a fold in thin sheets of aluminum, copper, Mylar, and paper. The relaxation is found to be best described by a Weibull distribution of relaxation times. The exponent  $\beta$  of the Weibull distribution characterizes two distinct classes of relaxation observed in metallic ( $\beta \simeq 2$ ) and polymeric materials ( $\beta \simeq 1$ ) respectively.

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