## Columbia University Algebraic Geometry Seminar

## Herb Clemens

University of Utah and IAS

## PROPOSAL FOR CONSTRUCTING A FORMAL "SUPERPOTENTIAL FUNCTION" VIA KURANISHI THEORY

Let S be a compact oriented real 2-manifold. For Calabi-Yau threefolds X, physical theory predicts a function f on some smooth space of  $C^{\infty}$ immersions  $S \to X$  such that the maps whose image is an algebraic curve
are given as the zero-scheme of df. We use Kuranishi theory to propose a
formal function f with the (formal analogue of the) desired property.

## Friday, September 28, 2001 2:30pm Mathematics 417