Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

**Suppression and Revival of Magnetic Correlations at Interfaces** AXEL EUVERTE, FREDERIC HEBERT, GEORGE BATROUNI, Institut Non-Lineaire de Nice, SIMONE CHIESA, College of William & Mary, RICHARD SCALETTAR, UC Davis — We study a model of metal-insulator interfaces consisting of a multilayer, repulsive Hubbard Hamiltonian in which the interaction is nonzero on one set of layers and zero on another. As the interface hybridization is tuned, the magnetism and spectral functions in the correlated layers undergo an evolution in which the signatures of strong interaction are first reduced and subsequently revived due to the formation of an interfacial spin liquid phase. The penetration into the correlated layers of the suppression of magnetic order is found to be 4-6 layers.

Simone Chiesa
College of William and Mary

Date submitted: 20 Nov 2011 Electronic form version 1.4