Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Enchancement of superconductivity in a three-dimensional hotspot model of competing orders in the cuprates ZACHARY RAINES, VALENTIN STANEV, VICTOR GALITSKI, Univ of Maryland-College Park — Recent experiments in the cuprates have seen evidence of a transient superconducting state upon optical excitation polarized along the c-axis. Motivated by these experiments we considered a hotspot model of competing superconductivity and bond density order in a system of stacked planes. We generically find an enhancement of superconductivity in the coexistent phase as a function of c-axis coupling strength. Furthermore, we propose a simple Floquet system which takes advantage of this enhancement.

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Date submitted: 12 Nov 2014 Electronic form version 1.4