Slave-Rotor Mean Field Theory of the Extended Hubbard Model on the Anisotropic Triangular Lattice JEFFREY G. RAU, HAE-YOUNG KEE, University of Toronto — We report on a theoretical investigation of a metal-superconductor-insulator transition on the anisotropic triangular lattice. We apply a self-consistent slave-rotor mean field theory to the extended Hubbard model on this lattice at half-filling. A variety of mean field phases are found in both the insulating and metallic regimes including nematic and smectic spin liquids. Preliminary applications to the strongly correlated organic materials will be discussed.

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