Abstract Submitted
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**Theory of Non-Fermi Liquids** PATRICK O'BRIEN, Binghamton University — The focus of this project is to understand the simplest model needed to explain the physics of the material FeCrAs. The geometry of the FeCrAs crystal is used to perform crystal field splitting calculations, which in turn indicates a model that we will attempt to use to describe two of the main trends in the experimental data collected for the material. The model that we believe captures the physical character of FeCrAs for the resistivity and heat capacity measurements is the double exchange model. Next, we must find a way to describe an antiferromagnetic transition at 125K.

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