



MIT Kavli Institute for
Astrophysics and
Space Research

Monday, August 17, 2009

**Re: Adam J. Burgasser Endowed Chair in
Astrophysics**

Dear Selection Committee:

Brown dwarfs are the Rosetta stones of astrophysics. However, their true nature is mysterious. They are ideal laboratories for constraining astrophysical theories, and finding them is the Holy Grail of observational astronomy. The new spectrograph FIRE will allow unprecedented studies of these enigmatic objects, opening up vast regions of parameter space. This will provide a census of these cosmic denizens, and a Galactic context. As holder of the A. J. Burgasser Endowed Chair in Astrophysics, I would solve those mysteries, use those laboratories, find those Grails, and explore that parameter space, aided immeasurably by a comfortable Chair. This research is of high intellectual interest and has many broader impacts. As Albert Einstein once said, "A table, a chair, a bowl of fruit, and a violin; what else does a man need to be happy?" I agree wholeheartedly with the inventor of relativity theory, and would add only one thing to his list: a modest grant that may be used for any purpose, research or otherwise.

Sincerely,

Joshua Winn

Joshua Winn

Assistant Professor of Physics

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