

CURRICULUM VITAE Richard S. Freedman

Education:

University of California Berkeley, CA	Ph.D. Astronomy	1974
University of California	M.A. Astronomy	1966
Earlham College, Richmond, In	B.A. Physics	1963

Recent Professional Experience:

Currently at the Ames Research Center as Principal Investigator on a Cooperative Agreement through SETI Institute. I am currently working on several projects involving the analysis of data from high dispersion laboratory spectra, and the modeling of the opacity and spectral features in the atmospheres of cool stars and brown dwarfs.

List of Recent Publications:

A Unified Theory for the Atmospheres of the Hot and Very Hot Jupiters: Two Classes of Irradiated Atmospheres, Fortney, J. J.; Lodders, K.; Marley, M. S.; Freedman, R. S., ApJ 678, 1419-1435, 2008.

Atmospheric Parameters of Field L and T Dwarfs. Cushing, Michael C.; Marley, Mark S.; Saumon, D.; Kelly, Brandon C.; Vacca, William D.; Rayner, John T.; Freedman, Richard S.; Lodders, Katharina; Roellig, Thomas L. ApJ 678, 1372-1395, 2008.

Line and Mean Opacities for Ultracool Dwarfs and Extrasolar Planets. Freedman, Richard S.; Marley, Mark S.; Lodders, Katharina. ApJ Supplement 174, 504-513, 2008.

Physical and Spectral Characteristics of the T8 and Later Type Dwarfs. Leggett, S. K.; Marley, M. S.; Freedman, R.; Saumon, D.; Liu, Michael C.; Geballe, T. R.; Golimowski, D. A.; Stephens, D. C. ApJ 667, 537-548, 2007.

Physical Parameters of Two Very Cool T Dwarfs. Saumon, D.; Marley, M. S.; Leggett, S. K.; Geballe, T. R.; Stephens, D.; Golimowski, D. A.; Cushing, M. C.; Fan, X.; Rayner, J. T.; Lodders, K.; Freedman, R. S. ApJ 656, 1136-1149, 2007.

The Influence of Atmospheric Dynamics on the Infrared Spectra and Light Curves of Hot Jupiters. Fortney, J. J.; Cooper, C. S.; Showman, A. P.; Marley, M. S.; Freedman, R. S. ApJ 652, 746-757, 2006.