

Atmospheric spectra of highly irradiated low-mass exoplanets

Masahiro Ikoma,¹ University of Tokyo

Diversity in measured mean density of transiting exoplanets indicates that close-in exoplanets have atmospheres of different compositions. We have recently investigated the structure and evolution of close-in Earth-like exoplanets that are subject to intense stellar radiation. Such extreme types of exoplanets include ones with rocky vapor atmospheres, hazy atmospheres, and expanding atmospheres. Here we present theoretically predicted spectra of such atmospheres and discuss their detectability.

¹ikoma@eps.s.u-tokyo.ac.jp