

The Spex Prism Library Analysis Toolkit: Tools for Characterizing Exoplanet Spectra

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The Spex Prism Library Analysis Toolkit (SPLAT) is a public curation of over 3000 near-infrared spectra of low mass stars, brown dwarfs, and planetary mass objects, primarily observed with the IRTF SpeX spectrograph. Originally conceived as a focused dataset, its scope has expanded to a “curation” model, with rich source data and data mining tools, integration of other spectral formats and user-supplied data, and an extensive analysis suite. The last includes template matching to library and user-supplied spectra, 13 sets of spectral models with associated grid-based and MCMC fitting routines, 5 sets of evolutionary models with population synthesis routines, and over 100 filter profiles and associated spectrophotometric analysis tools. In this talk I will demonstrate a few of SPLAT’s capabilities, and solicit feedback from conference participants on what tools are desired by the exoplanet community.

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