
specsy

Release 0.0.3

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DOCUMENTATION:

1	Installation	3
2	API	5

This library provides a set of tools for the analysis of astronomical spectra. This is the alpha-release.

Most of its functions assume an input with the [LiMe](#) formatting.

These are the features currently available:

- Calculation of the logarithmic extinction calculation coefficient $c(H\beta)$.
- Calculation of the electron density from the $[SII]6716, 6731$ doublet via a Monte-Carlo sampling
- Calculation of sulphur abundance using the calibration from [Díaz et al \(2022\)](#)

INSTALLATION

SPECSY can be installed from its [pip](#) project page by running this command:

```
pip install specsyt
```

To update the library to its latest version you can run this command:

```
pip install specsyt --upgrade
```

1.1 Dependencies

The current version of LiME has these dependencies:

- [Numpy](#)
- [Pandas](#)
- [Matplotlib](#)
- [Lime](#)
- [Pyneb](#)
- [Astropy](#) (loading and saving *.fits* files)

The following dependencies are not compulsory but they provide more options for the library inputs/outputs:

- [asdf](#) (Saving the logs as *.asdf* files)
- [PyLatex](#) (Saving the logs as *.pdf* files)

1.2 Development

SPECSY is currently in an alpha release. Please check its [github](#) for the latest version news and tutorials. Any comments/problems/request can be added as an issue on the [github](#) page.

2.1 Extinction

2.2 Chemical model