

VIOMASS: Virtual Observatory Integration Of Madcuba And SLIM Spectra.

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Abstract

MADCUBA is an astronomical package primarily aimed to reduce and analyze data from many radio astronomical facilities. MADCUBA is not only able to process individual spectra, but also data cubes. In addition, it is able to identify thousands of molecular rotational transitions and radio recombination lines by consulting the most important molecular databases. One of its tasks -SLIM- simulates LTE conditions and makes a semi-automatic fitting of many lines simultaneously.

Under a collaborative effort of Virtual Observatory (VO) and MADCUBA groups, we are implementing new functionalities in MADCUBA to make it VO-compliant. The final objective is to profit the robustness of MADCUBA and the versatility of VO in order to increase visibility of MADCUBA and allow users to enhance results through the interaction with the pleiad of VO tools and available data sets.

In this e-poster we present the scope of the project, changes already implemented and future work. In detail, we show the data model which will be implemented and the options that the user will have to export their work adhering to the VO standards.