IVOA May 2021 Interoperability Meeting



Abstract ID: 43

Radio Astronomy projects in the Spanish VO

Content

Spanish Virtual Observatory is starting a new set of activities and collaborations in radio astronomy, being our final aim the integration of large data cubes (both observed and modeled) into the VO project.

In this talk we update the current status and prospects, with particular emphasis in a recently-published catalog of SiO maser emission toward oxygen-rich stars and also in the road to convert MADCUBA's output in VO-compliant.

The SiO catalog is complex and highly multidimensional, because it involves different isotopologs, rotational transitions, vibrational numbers, sources, telescopes, receivers, bands, observation modes and polarizations. MADCUBA, on the other hand, is a complete suite build to manage large data cubes. It is able to visualize and analyze spectroscopy data cubes, to identify molecular species, and to derive molecular parameters (LTE and non-LTE). This last feature -identified as SLIM and SLIM-multifit- has the potential to become particularly useful in the VO context.

Other short- and mid-term endeavors are also outlined.

Preferred talk time

My time zone: GMT+2 - Preferred time slot: GMT 0900 to 1900

Primary authors: RIZZO, Ricardo (Centro de Astrobiologia); Mrs RODRIGO, Carlos (Centro de Astrobiolo-

gia)

Presenter: RIZZO, Ricardo (Centro de Astrobiologia)

Track Classification: Data Access Layer; Data Model; Radio Astronomy

Submitted by RIZZO, Ricardo on Monday 17 May 2021