



El Departamento de Informática de la Universidad Técnica Federico Santa María tiene el agrado de invitar a la comunidad Universitaria al coloquio del Departamento de Informática. Esta presentación se realizará en el auditorio Claudio Matamoros (F-106), en la Casa Central el día **Martes 2 de Diciembre a las 12:30** y por videoconferencia a la Sala de Reuniones, Campus Santiago, San Joaquín.

## Título

Studying low-mass stars in the VO and other things!

## Invitado



Amelia Bayo, Ph.D.  
Researcher  
Universidad de Valparaíso

### Mini Bio

Graduated with minors in Mathematics, Geodesy and Astronomy from Universidad Complutense (Madrid). Master in astrophysics and PhD in physics and cosmology from Universidad Autonoma (Madrid, 2009). PhD supervised by Dr. Barrado at the Laboratory for Fundamental Physics and Astronomy (hosted at the European Space Agency, ESA, campus), with one year as Spitzer undergrad fellow at Caltech (Pasadena, California). Awarded the European Southern Observatory (ESO) fellowship for three years in Chile and the fourth year as visiting researcher at the Max-Planck Institut fuer Astronomie (MPIA, Heidelberg, Germany). MPIA independent fellow researcher for one year and since August 2014, Associate Professor at the Instituto de Astronomia from Universidad de Valparaíso.

The lines of research can be separated in "purely astrophysical": mechanism of formation of substellar objects and disk evolution through the whole stellar mass spectrum, in particular paying attention to the dependence on the mass of the central object. And "data-driven": in particular the homogeneous analysis of large amounts of multi-wavelength data of young stars. In this context, Amelia Bayo is the PI of VOSA (Virtual observatory SED analyzer, used in ~60 refereed papers), a publicly available software for the compilation and analysis of spectral energy distributions of different kinds of objects, merging seamlessly public and private data.

## Resumen

After over ten years of the first implementations, the Virtual Observatory is still far too little exploited in the everyday work of astronomers. A very important problem is the lack of "advertizing" in the non-technical community and the lack of bridges between the developers and users of algorithms, protocols, and pieces of software. In this talk I will review (in a biased way that allows me to go into more details) science cases that have benefited immensely from VO-techniques and tools. I will also try to be as critical as possible regarding problems that are still not solved in the "VO-world", where the interactions with the users/astronomers is vital for a successful development.

## Lugar y Fecha

2 de Diciembre de 2014, **12:30**

Auditorio Claudio Matamoros (F-106).

Departamento de Informática, Valparaíso.

UTFSM

La charla se transmitirá en videoconferencia a la Sala de Reuniones, Campus Santiago, San Joaquín.

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