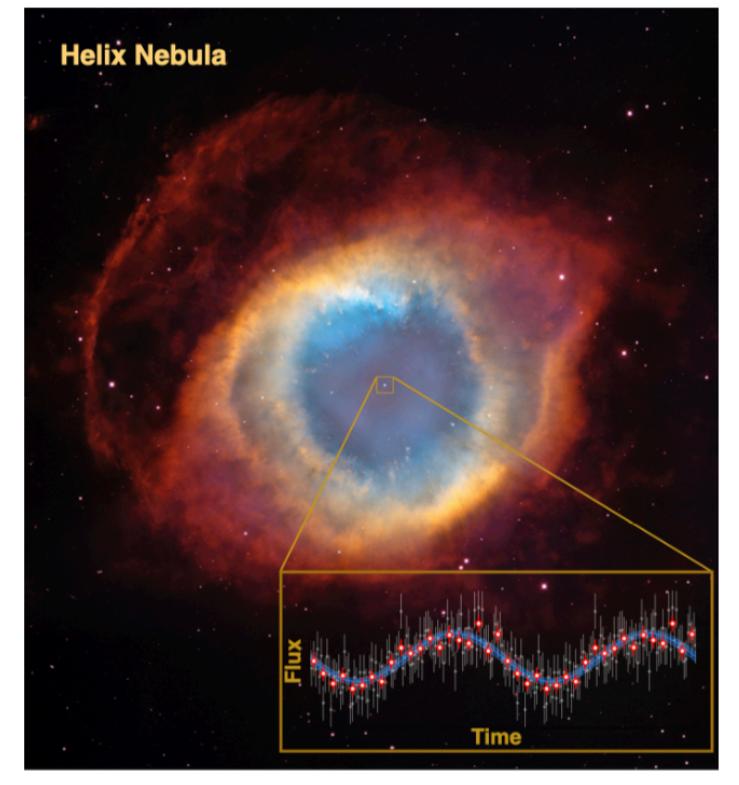
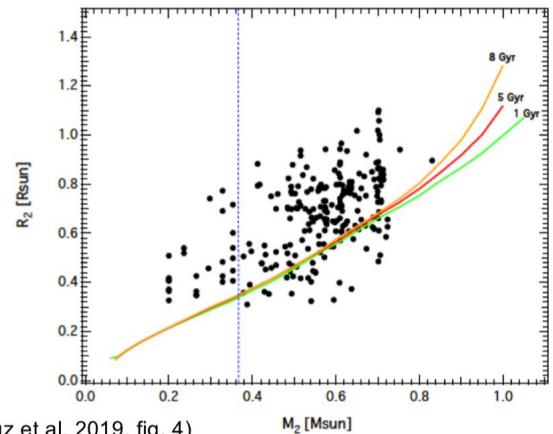
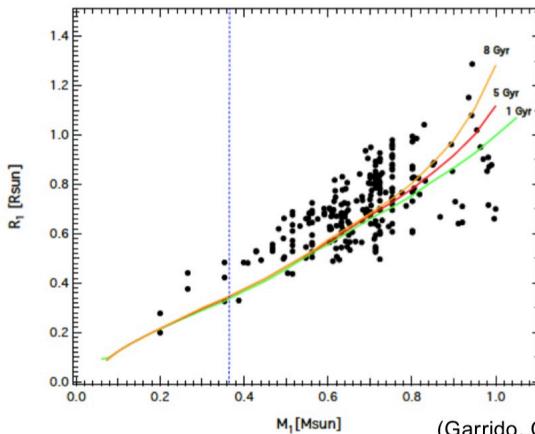


# PLANETARY NEBULAE



- VL002 - [Aller et al.](#) The role of TESS in the search for binary central stars of planetary nebulae
- VL011 - [Jones et al.](#) Post-RGB Planetary Nebulae
- VL025 - [González Santamaría et al.](#) Binary Stars in Planetary Nebulae with GAIA DR2
- VL046 - [Munday et al.](#) The post-common-envelope binary central star of the planetary nebula ETHOS 1

# DETERMINATION OF FUNDAMENTAL STELLAR PARAMETERS



(Garrido, Cruz et al. 2019, fig. 4)

VL001 - [Cruz et al.](#) Radius anomaly in short-period EB

VL035 - [Mathur et al.](#) Surface rotation and magnetic activity Solar stars with KEPLER

Solar-like oscillations detected in 518 stars. Why not in the remaining stars?

VL038 - [Barceló Forteza et al.](#) Unveiling the power spectra of  $\delta$  Scuti stars with TESS

Estimate masses and radii for solar-type pulsators

VL043 - [González-Cuesta et al.](#) Optimizing TESS short cadence aperture for Asteroseismology of

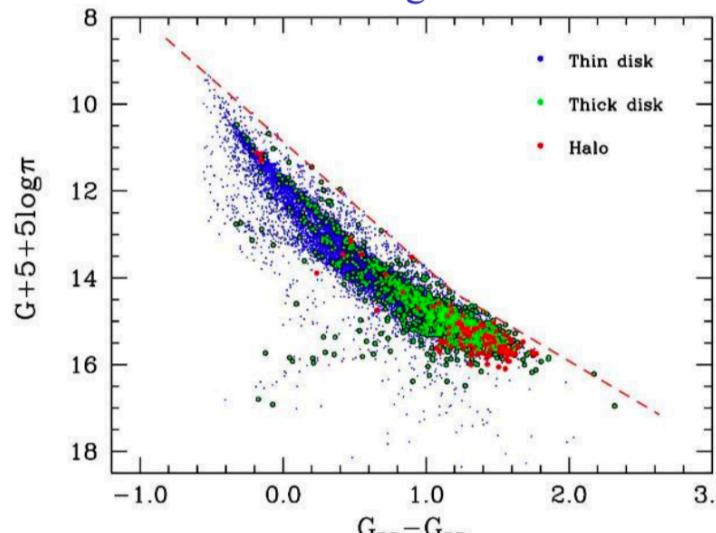
solar-like stars



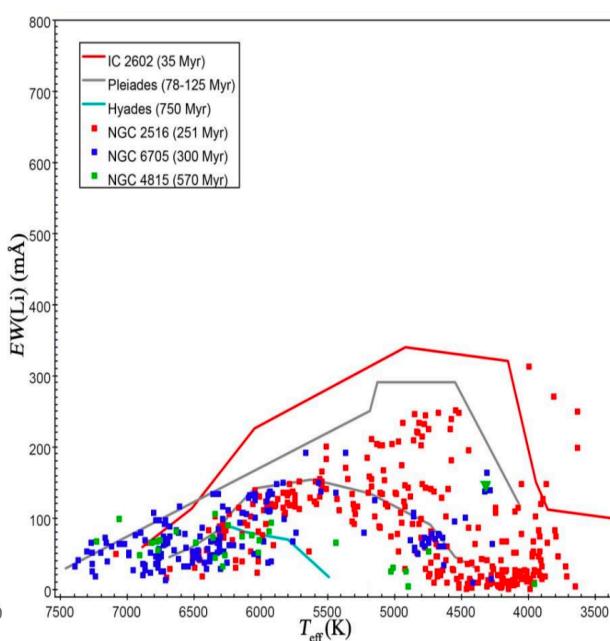
VL010 - [Jones et al.](#) Binary Star Modelling



## H-R Diagram



Intermediate-age clusters (50-700 Myr)



VL005 - [Carnero et al.](#) Classify L and T dwarfs in the DES + VHS

AllWISE system reach 400pc for early types 11,745 BDs

<https://des.ncsa.illinois.edu/releases/other/y3-mlt>

VL012 - [Vioque et al.](#) Cataloguing new high-mass Pre-Main Sequence and Classical Be stars using Machine Learning and Gaia

VL054 - [Jimenez-Esteban et al.](#) The Galactic WD population GAIA-VO

VL058 - [González-Payo et al.](#) Wide companions to M and L subdwarfs with Gaia DR2 and the Virtual Observatory

VL075 - [Gutiérrez-Albarrán et al.](#) The Gaia-ESO Survey: Calibrating the lithium-age relation with open clusters and associations.



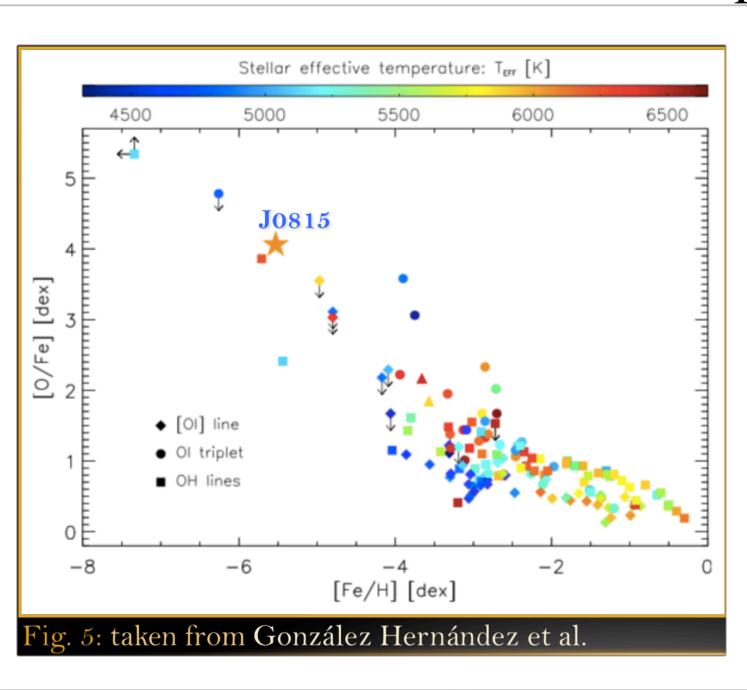
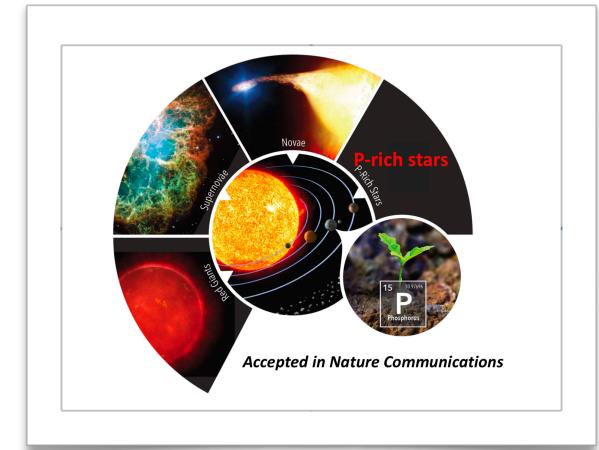
- VL032 - [Cortés-Contreras et al.](#). Kinematics of M dwarfs in the CARMENES input catalogue
- VL063 - [Cifuentes et al.](#). Colours and luminosities of M dwarfs in the CARMENES input catalogue
- VL071 - [Marfil et al.](#). Stellar atmospheric parameters of FGK-type stars (EW method) and M-type stars (spectral synthesis) from high-resolution optical and near-infrared CARMENES spectra
- VL076 - [Labarga et al.](#). The chromospheric activity of M Dwarfs from visible and near-infrared CARMENES spectra: analysis of flux-flux relationships
- VL078 - [Montes et al.](#). Identifying activity-sensitive spectral lines in the CARMENES VIS and NIR spectral range of M dwarfs



# CHEMISTRY

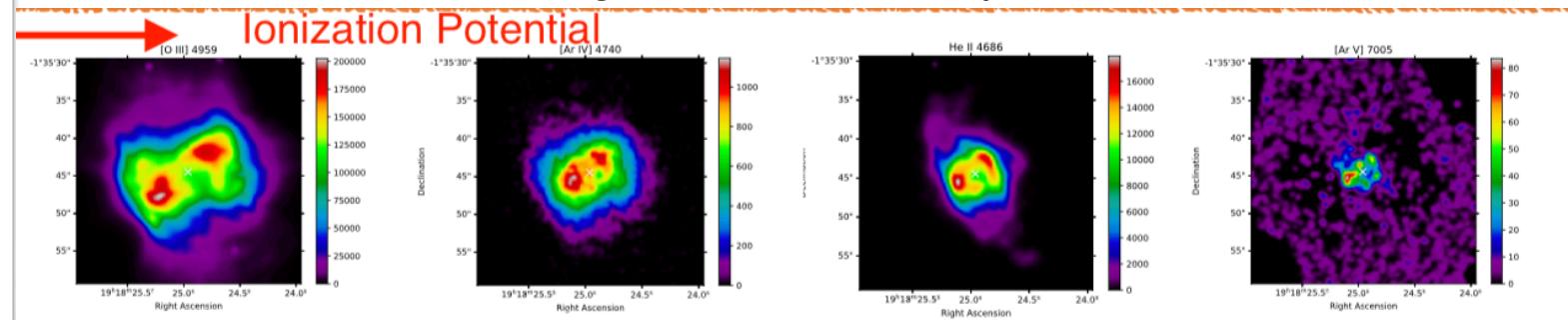
VL009 - Masseron et al. Discovery of P-rich stars

VL013 - Navó et al. Stars enriched in neutron-capture elements from medium-resolution spectra



VL014 - García-Rojas et al.

A MUSE view of high-ADF Planetary Nebulae

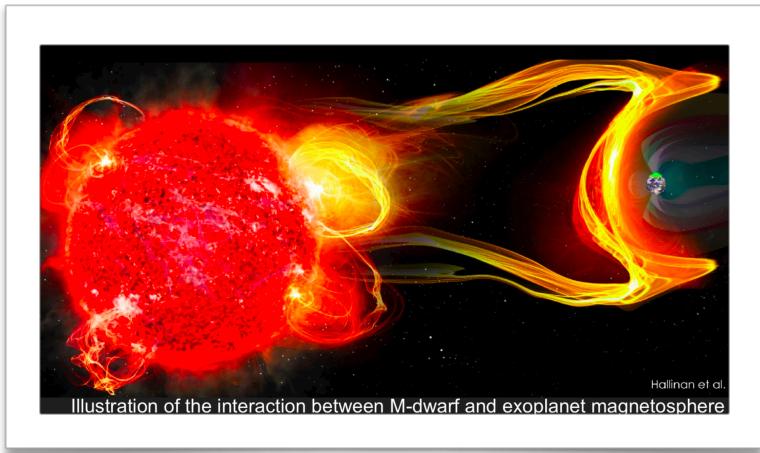


VL045 - Mendez Delgado et al. Photoionized Herbig-Haro objects in the Orion Nebula through VLT's deep spectroscopy I: HH529 II-III

VL073 - González Hernández et al.

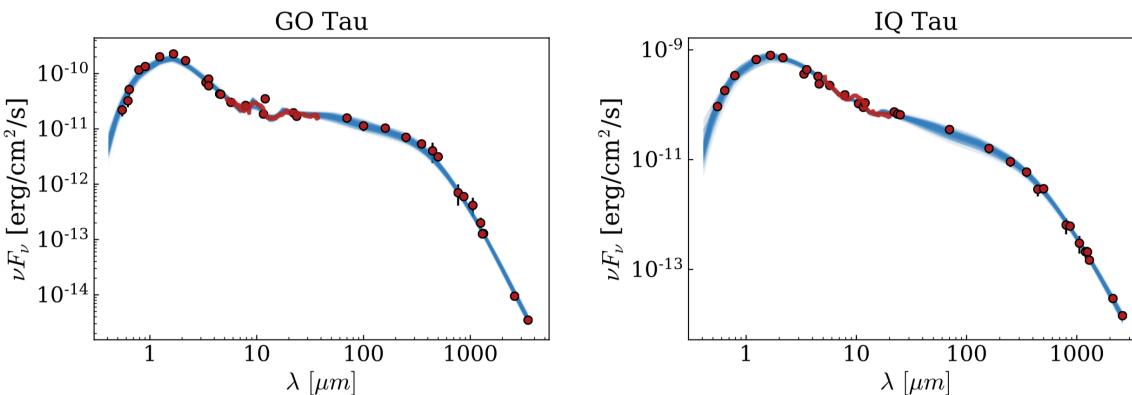
Extreme Enhancement in CNO of the IRON-POOR dwarf J0815+4729

# DISKS, LOW-MASS, SUBSTELLAR OBJECTS, PLANETS, HABITABILITY



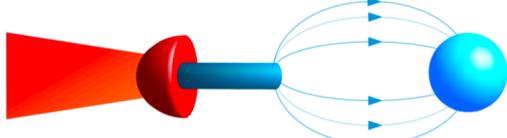
VL037 - [Climent et al.](#) Radio and infrared interferometry  
of low-mass stars and exoplanets

VL067 - [Riadigos et al.](#) Cosmic Rays as a clue constraint in Exoplanet  
Habitability

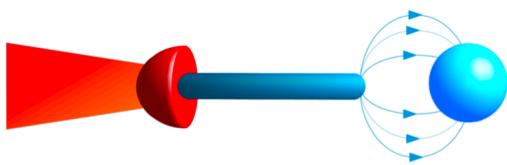


Two examples of fitted SEDs. Red dots and lines are observational data. Blue lines show 1000 models randomly drawn from the obtained posterior distributions (Ribas et al., submitted).

VL049 - [Ribas et al.](#) Protoplanetary disks meet artificial  
neural Networks: revisiting the viscous disk  
model and updated disk masses



VL036 - Guzmán- Diaz et al. Homogeneous study of Herbig Ae/Be stars from spectral energy distributions. Disk clearing by photoevaporation



VL059 - Mendigutía et al. Feed and Grow. Understanding and Measuring disk-to star Accretion rates.



VL056 - de Gregorio Monsalvo et al. Origin of the emission at centimeter wavelengths in the transitional disk surrounding T Chamaleontis

