



# Stellar Evolution



## About Us

We study the evolution of low and intermediate mass stars ( $M < 8 M_{\odot}$ ): the mixing and nucleosynthesis processes occurring in their interiors, their surface chemical composition, final outcome as white dwarfs and/or thermonuclear supernovae, and their use in cosmology and the chemical evolution of the Universe, all both from the theoretical and observational points of view. We do also asteroseismology from space.

## Announcements:

- XII Torino Workshop on Nucleosynthesis in AGB stars (July 2016, Budapest)
- XIV International Conference on Nuclei in the Cosmos (June 2016, Japan)
- Supernovae through the ages: understanding the past to prepare for the future (August 2016, Eastern Island, Chile)

<http://wdb.ugr.es/~fqm292/>

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PLANETAS



ESTRELLAS



QUÍMICA DEL  
UNIVERSO



ASTROPARTÍCULAS



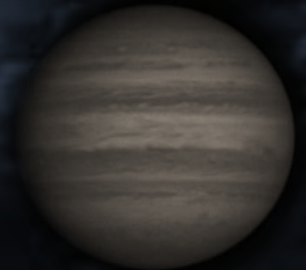
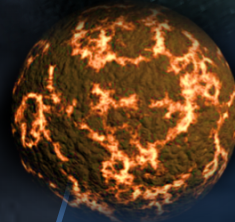
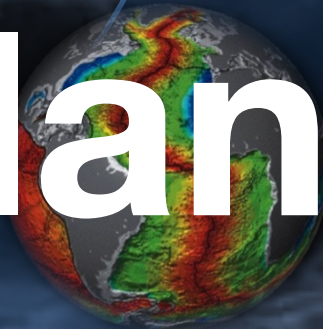
SUPERNOVAS

<http://wdb.ugr.es/~fqm292/>

# Estrellas

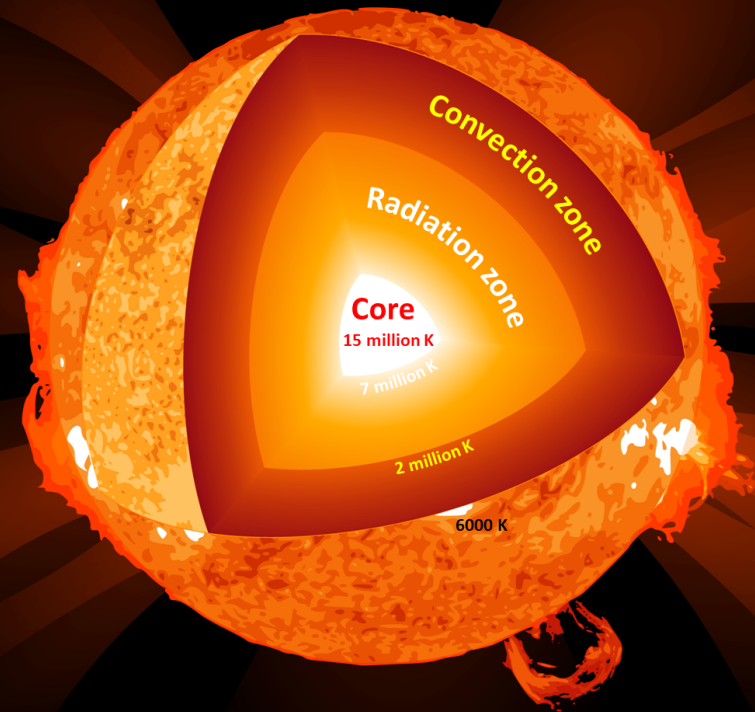
LIFE

# Planetas

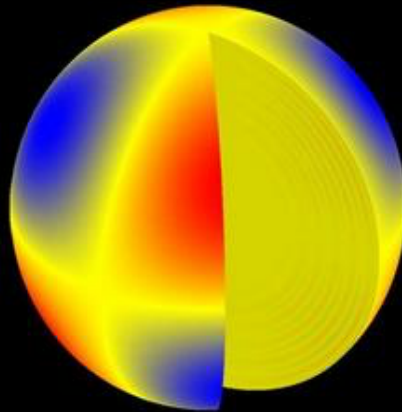
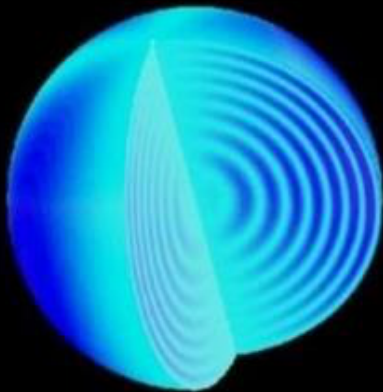


# Estructura y Evolución

MODELOS DE ESTRELLA



Stellar Vibrations



SISMOLOGÍA ESTELAR

# Herramientas en VO

BIG DATA

CÁLCULO MASIVO

TOUCAN



## Toucan Data Search

New Search Restart

199 results have been found for your search criteria.

### Summary table

Here you can see the minimum and maximum value of the parameters for the models satisfying your query.

	$T_{\text{eff}}$	Lum	Log(g)	Density	Age	[Fe/H]	Z	Hcent	$R_{\ast}$	Mass	Vrot	Wrot	Trot	$\alpha_{\text{MLT}}$	Over.	F0	F1	F0/F1	$\Delta(v)$	$\delta(v)$
min	6066.07	1.884	4.057	0.332	0	0.122	0.022	9.555e-4	1.244	1.300	0	0	0	1.600	0	209.000	277.800	0.688	59.880	-83.280
max	6413.64	4.238	4.362	0.950	3587.000	0.122	0.022	0.693	1.767	1.300	0	0	0	1.600	0	334.700	433.200	0.773	112.000	104.300

HR diag

### Search results

Showing results 1 to 10. Use pagination/sort options if you wish.

Order by: Data Col. ascending Show: 10 results per page

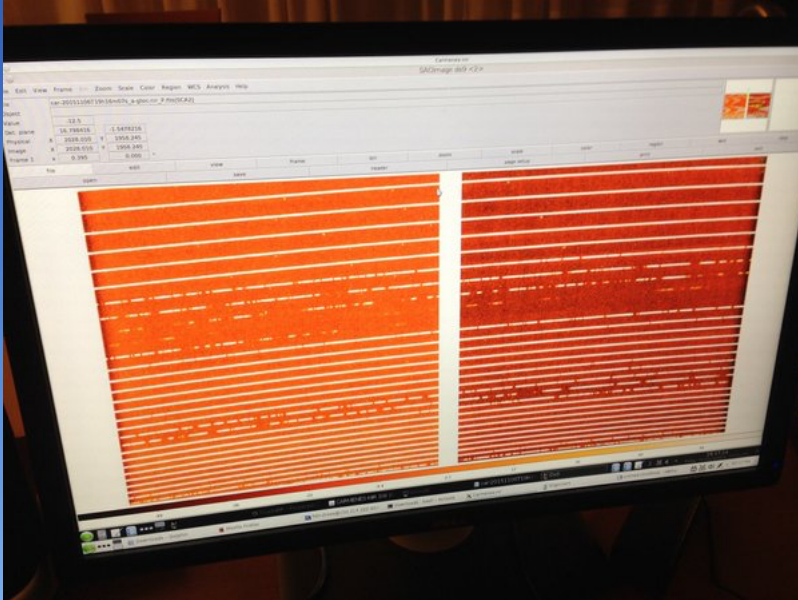
Go to page: 1 <Prev Next>

Mark All Unmark All Plot

Plot	Files	Data Col.	Track Id	AuthID	$T_{\text{eff}}$	Lum	Log(g)	Density	Age	[Fe/H]	Z	Hcent	$R_{\ast}$	Mass	Vrot	Wrot	Trot	$\alpha_{\text{MLT}}$	Over.	F0	F1
<input type="checkbox"/>	CESAM2k+GraCo	Test JR 2	VO-m130fe012a160o000rot000	1528	6243.39	4.227	4.060	0.336	3587.000	0.122	0.022	9.555e-4	1.761	1.300	0	0	0	1.600	0	209.200	277.90
<input type="checkbox"/>	CESAM2k+GraCo	Test JR 2	VO-m130fe012a160o000rot000	1527	6237.88	4.238	4.058	0.333	3587.000	0.122	0.022	0.001	1.766	1.300	0	0	0	1.600	0	209.200	277.90
<input type="checkbox"/>	CESAM2k+GraCo	Test JR 2	VO-m130fe012a160o000rot000	1526	6231.64	4.224	4.057	0.332	3587.000	0.122	0.022	0.001	1.767	1.300	0	0	0	1.600	0	209.000	277.80
<input type="checkbox"/>	CESAM2k+GraCo	Test JR 2	VO-m130fe012a160o000rot000	1525	6225.77	4.195	4.059	0.334	3587.000	0.122	0.022	0.001	1.764	1.300	0	0	0	1.600	0	209.500	278.40
<input type="checkbox"/>	CESAM2k+GraCo	Test JR 2	VO-m130fe012a160o000rot000	1524	6220.89	4.162	4.061	0.336	3586.000	0.122	0.022	0.001	1.760	1.300	0	0	0	1.600	0	210.200	279.30
<input type="checkbox"/>	CESAM2k+GraCo	Test JR 2	VO-m130fe012a160o000rot000	1523	6217.08	4.134	4.063	0.338	3586.000	0.122	0.022	0.001	1.756	1.300	0	0	0	1.600	0	210.800	280.10
<input type="checkbox"/>	CESAM2k+GraCo	Test JR 2	VO-m130fe012a160o000rot000	1522	6214.16	4.112	4.064	0.340	3586.000	0.122	0.022	0.001	1.753	1.300	0	0	0	1.600	0	211.300	280.80
<input type="checkbox"/>	CESAM2k+GraCo	Test JR 2	VO-m130fe012a160o000rot000	1521	6212.15	4.099	4.065	0.341	3586.000	0.122	0.022	0.001	1.751	1.300	0	0	0	1.600	0	0	0

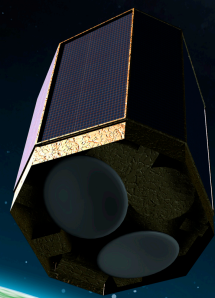


# carmenes

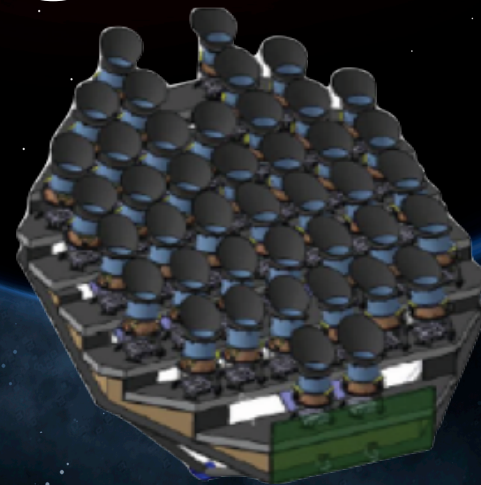




# PLATO 2.0



2025







Estrellas AGB

The image shows a vast field of interstellar dust grains. The grains are of various sizes, from tiny specks to larger, more complex structures. They exhibit a range of colors, including shades of brown, tan, and grey, set against a deep, dark blue-black background. The lighting creates highlights and shadows on the grains, giving them a three-dimensional appearance. The overall scene is a dense, chaotic distribution of these microscopic particles.

Granos de polvo de AGB !

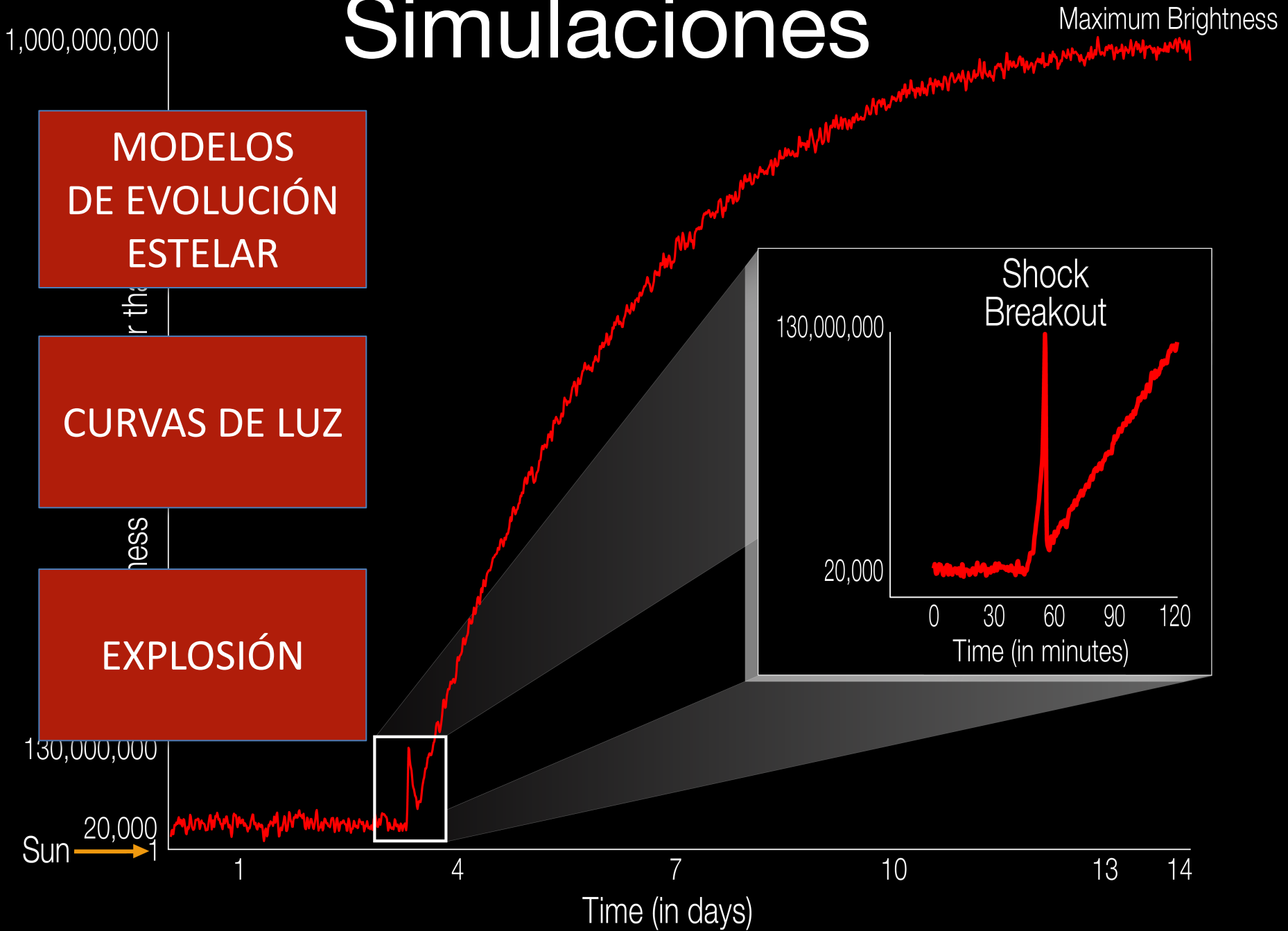
# SUPERNOVAS



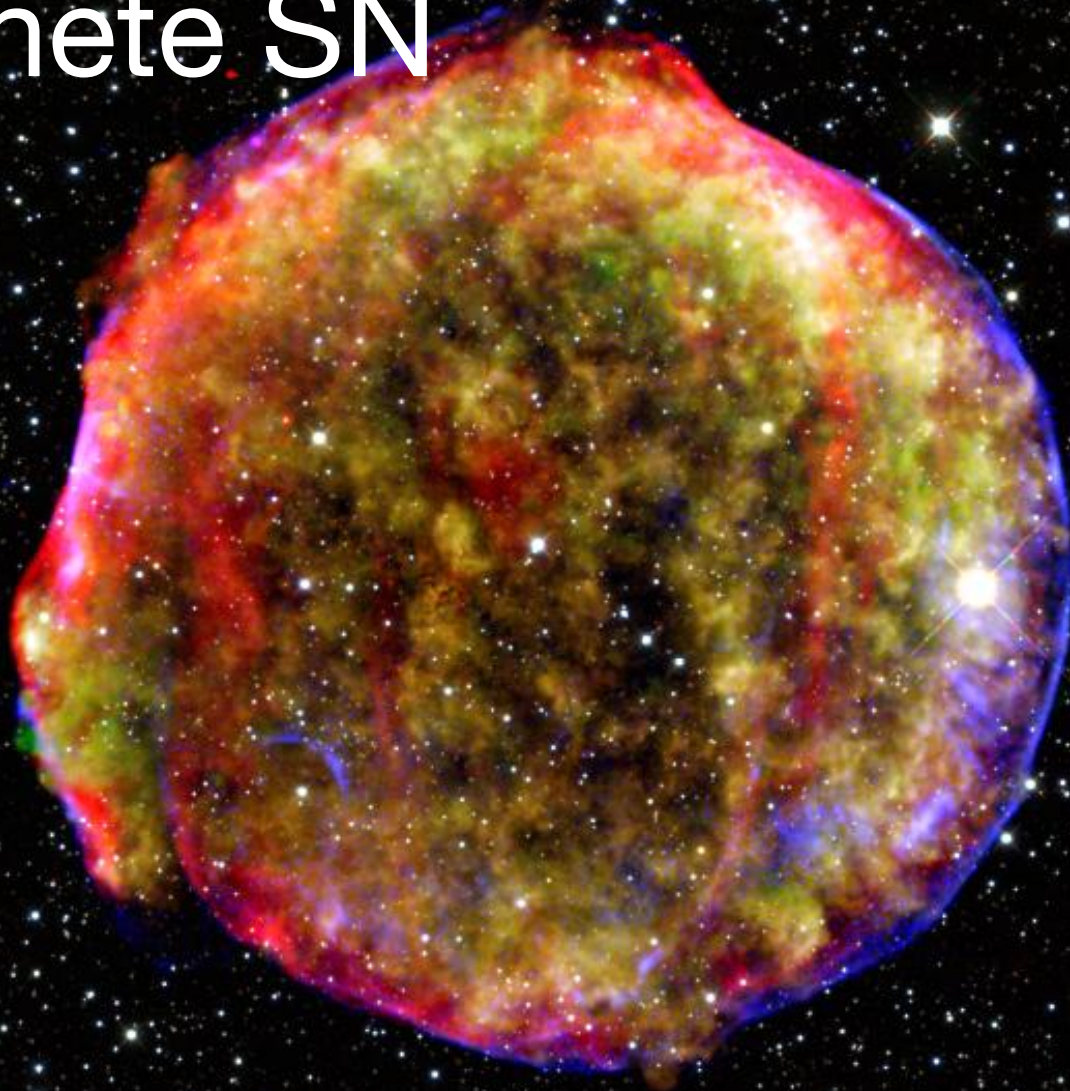
# Objetos fascinantes



# Simulaciones

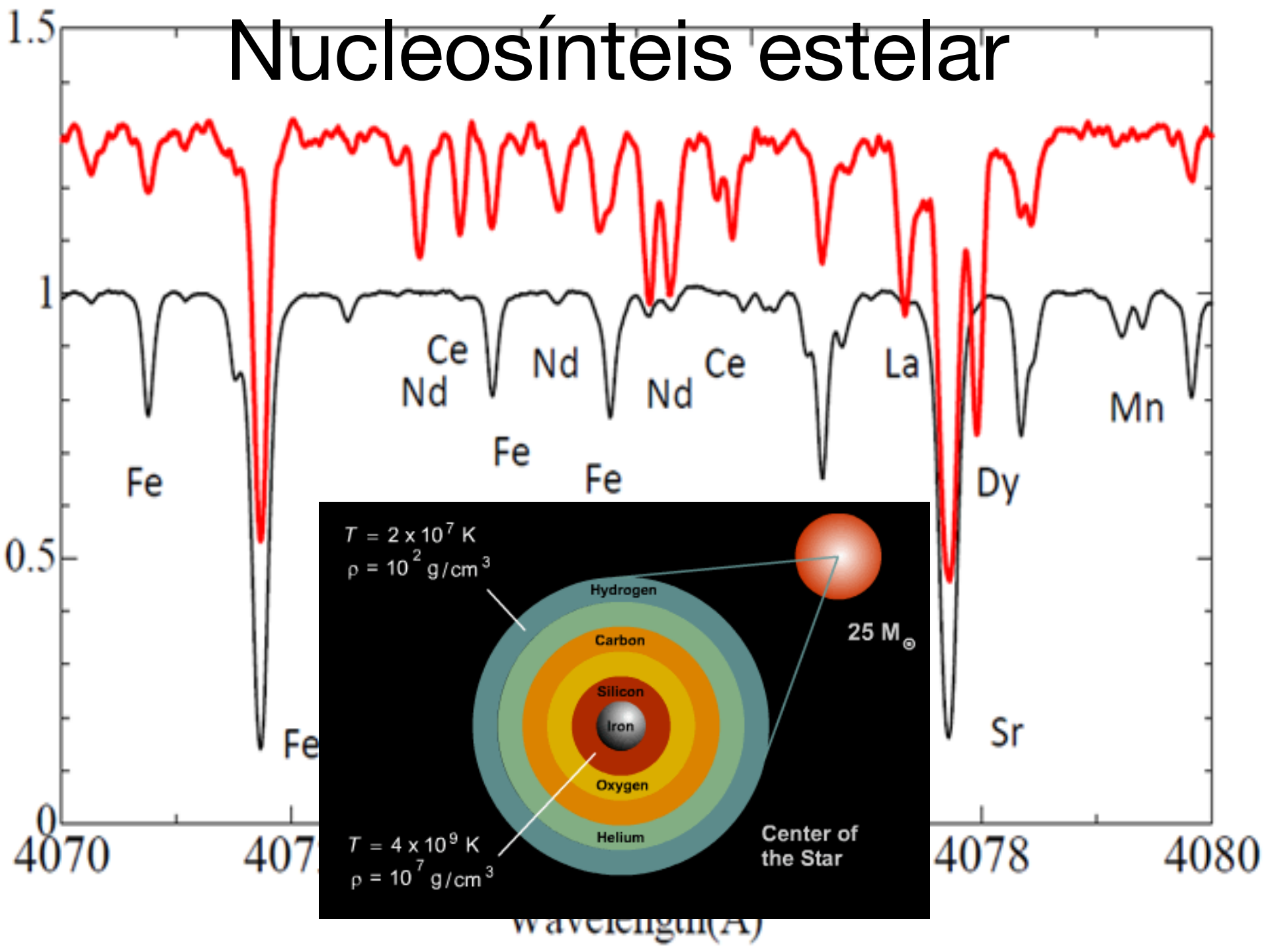


Remanete SN

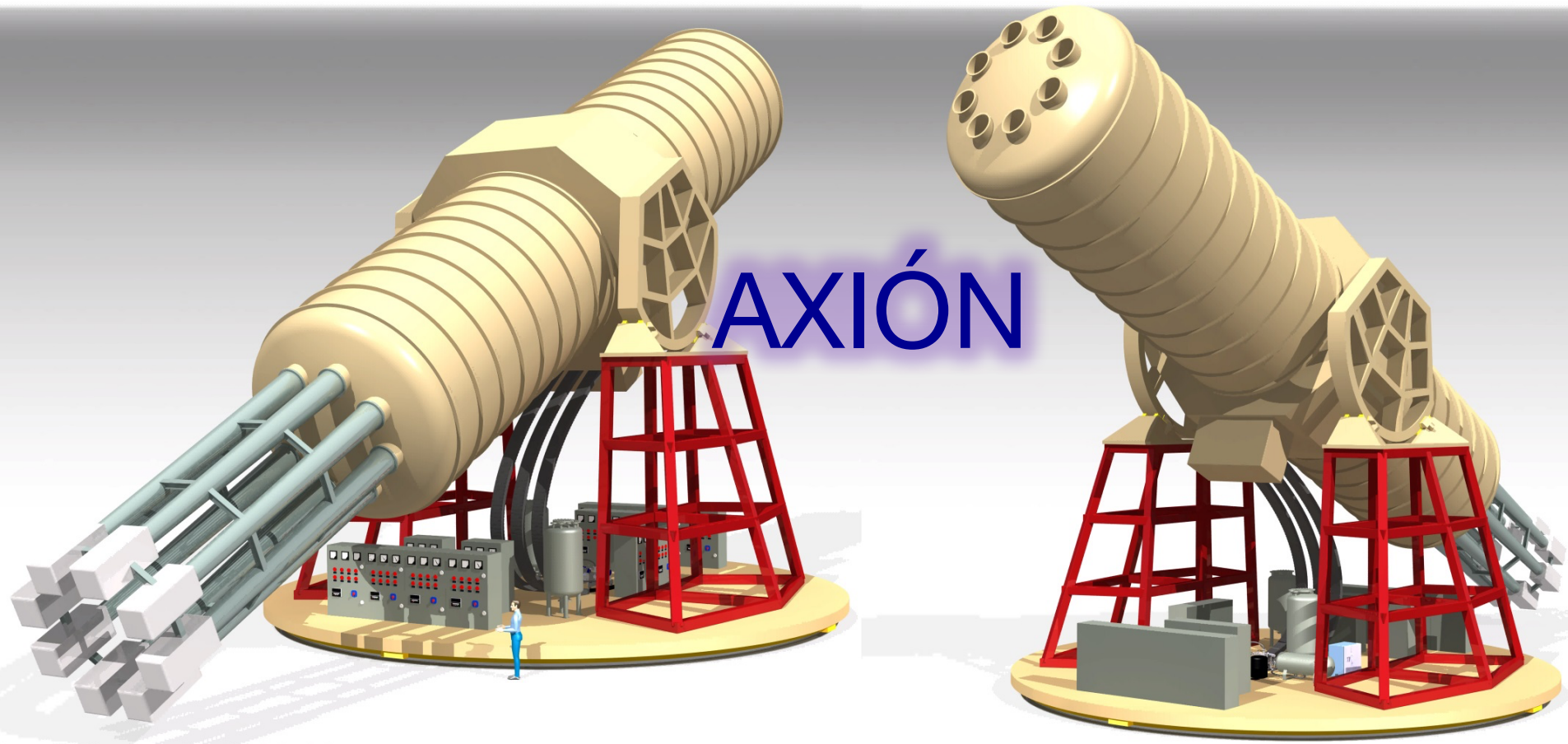


Tycho Brahe 1572 !

# Nucleosínteis estelar



# Astropartículas

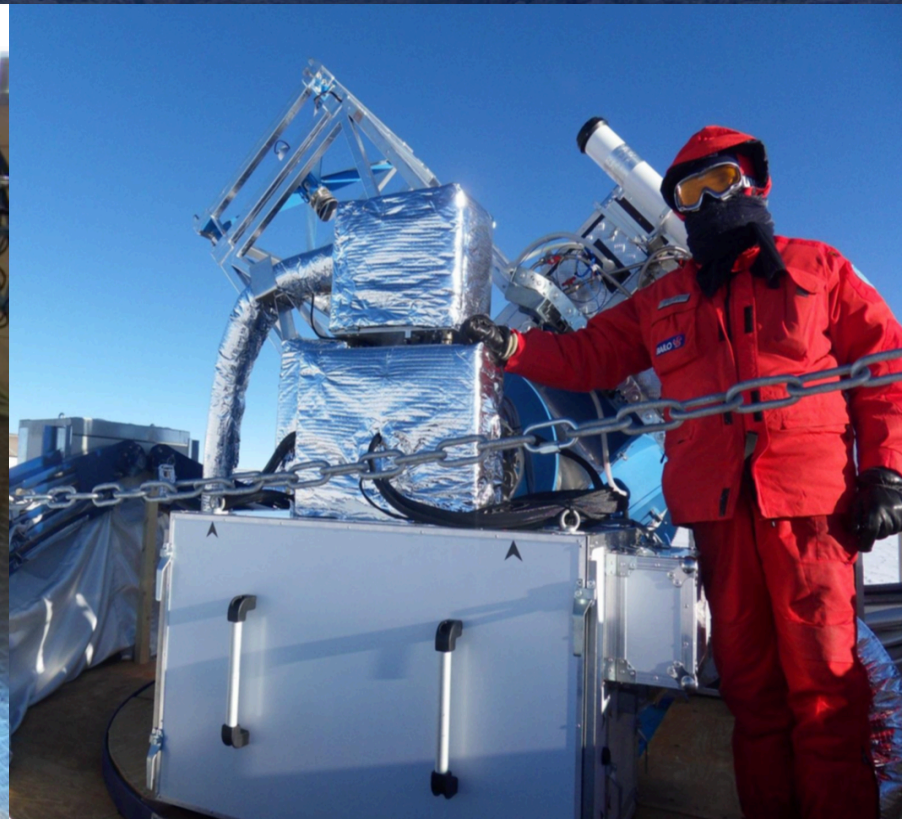




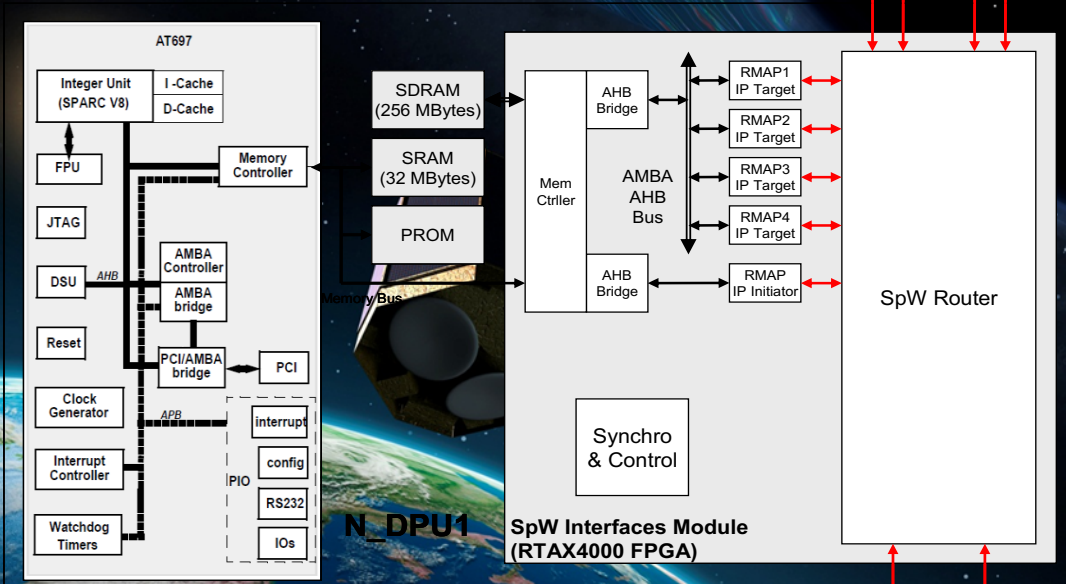


# OBSERVACIONES

# IRAIT



# PLATO 2.0



# MEU

To Router\_M  
To Router\_N