



Aurore Blazère JUL 5<sup>th</sup>, 2018



## Gaia-ESO Survey: Hot stars in Carina Nebula

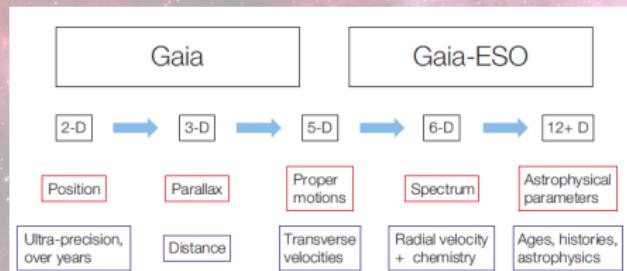
Aurore Blazère

AGO, Université de Liège, Belgique

Collaborators: E. Gosset, T. Morel and  
L. Mahy

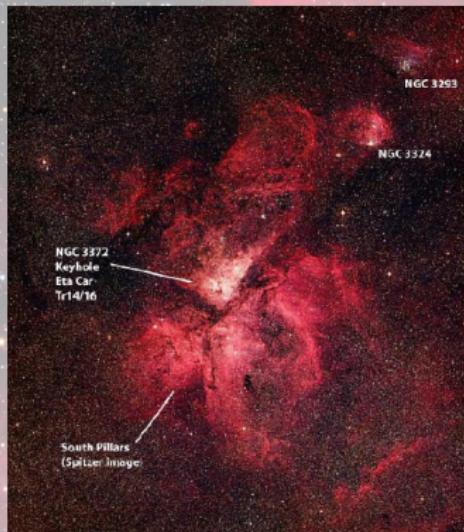
# Description of GES

- Aims of GES:
  - provide the first homogeneous overview of the distributions of kinematics and elemental abundances.
  - quantify the formation history and evolution of all component of the Galaxy.



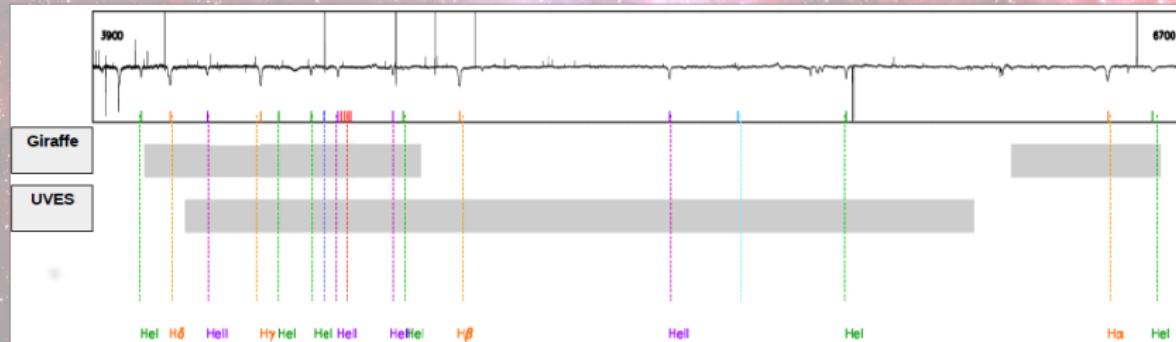
- Science with hot stars in GES:
  - Compare their position in the HR diagram with theoretical evolutionary tracks and isochrones.
    - critical tests of stellar evolution modelling.
  - Constrain the upper part of the Initial Mass Function (IMF).

# Observations

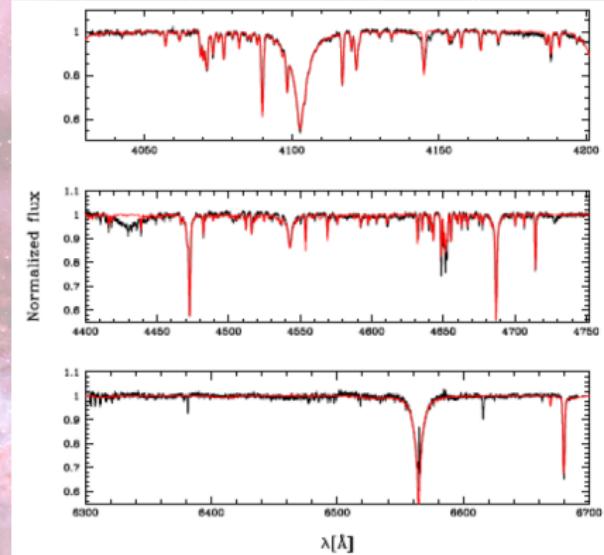
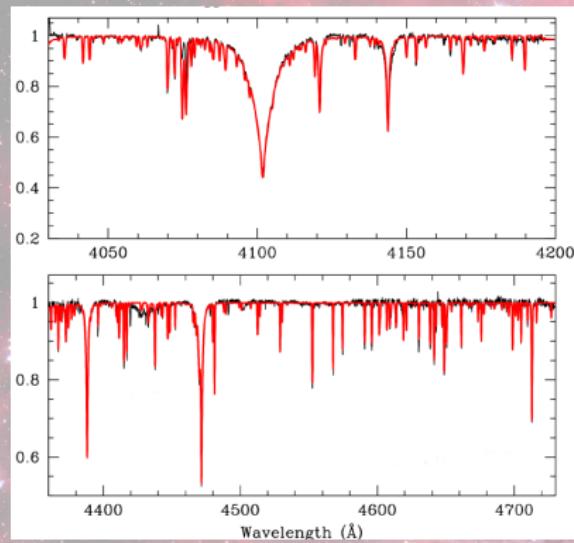


- Young open clusters in Carina Nebula
- FLAMES instrument:

Grating	$\lambda$ range (Å)
GIRAFFE	
HR03	4033-4201
HR04	4340-4587
HR05A	4340-4587
HR06	4538-4759
HR14A	6308-6701
UVES	
UVES 520	4140-6210



# Results



$$v_r = -10 \text{ km/s}$$

$$vsini = 25 \text{ km/s}$$

$$T_{eff} = 22842 \text{ K}$$

$$\log g = 3.81$$

$$v_r = -16 \text{ km/s}$$

$$vsini = 245 \text{ km/s}$$

$$T_{eff} = 32560 \text{ K}$$

$$\log g = 4.064$$