#### Because of Bess : I chose spectroastronomy like amateur





#### Jean-Jacques Broussat



#### In a previous life

- Engineer in computers network and industrial computers
  - Hardware development
  - Software development



Source : Wikipedia





#### Now, in retirement

- What to do ? :
- With astronomy I found :

Notions I saw in engineer school :

- math
- physics : optics, energy, atoms, ...

Sharing of knowledge from/to somebody

Use of software for : autoguiding, capture, astrometry, spectrometry, ...

Communications between computers and devices

• and ...





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• and still a packet of cables

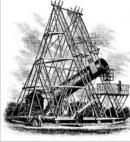






#### What to do in astronomy ?

Visual? •



Source : Wikipedia Telescope of Herschel

astrophotography? •



Source : CAA - NGC 6992

radioastronomy? •





Source : Wikipedia



# Finally : in 2011, spectroastronomy

• Then, spectroastronomy ?

In 2011, I came to the spectro-party at OHP, with no devices, for seeing what's spectroastronomy.

I saw there is a community

Several evangelists spoke about the Bess professional/amateur program

- Less devices than astrophotography
- Not the thousandth photos of the moon in newspaper or web site
- More various than radioastronomy
- I could do it in my backyard, in the suburbs of Paris

#### So, I chose spectroastronomy





 I bought a telescope C9 from Celestron, an EQ6 mount, a Star Analyzer and a Canon 350D



Source : Shelyak

• I was ready for the spectro-party of 2011, where I learned :

to select a star

to capture

to create profil with ISIS

• I became member of the Astronomy Club of Antony





- This year I was sure I want to continue to do spectroastronomy
- I bought an alpy 600 and went with it at the spectro-party at OHP



• And I followed the diploma DU-ECU ("Diplôme universitaire- Explorer et comprendre l'Univers") of the Paris Observatory

During this cursus I went during a week at OHP,



where I passed a night with :

Karin (the post-doctorate who manages our team)



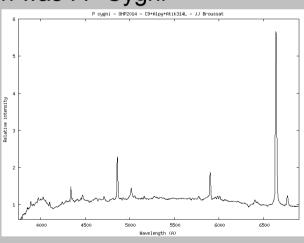
Aurélie : the spectroscope of the T152



- As I succeeded the DU-ECU, I continued with the DU-SU ("Structuration de l'Univers")
- For the DU-SU, we must write a publication. I chose : "the Be stars"
- I went to the spectro-party at OHP.

This year, the mission was : P Cygni



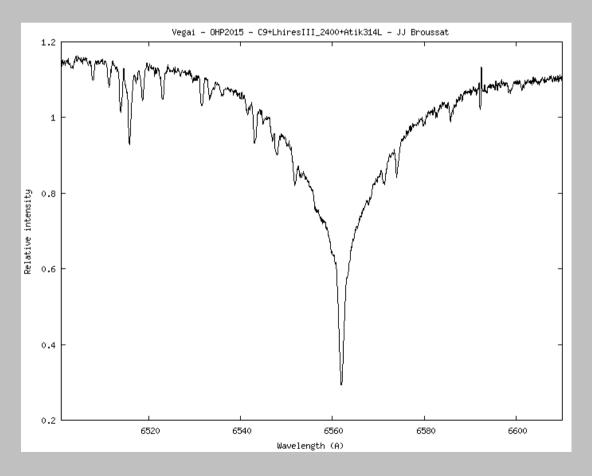


• The Astronomy Club of Antony bought a Lhires III, with a 2400 gr/mm grating module





- This year, I learned how to control the Lhires III
- At OHP 2015, I had problems of software. It was not the best session.

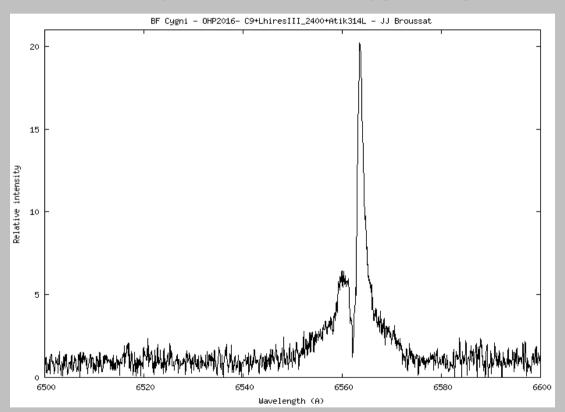








• The target at the spectro-party at OHP was BF Cygni (mag 10) :



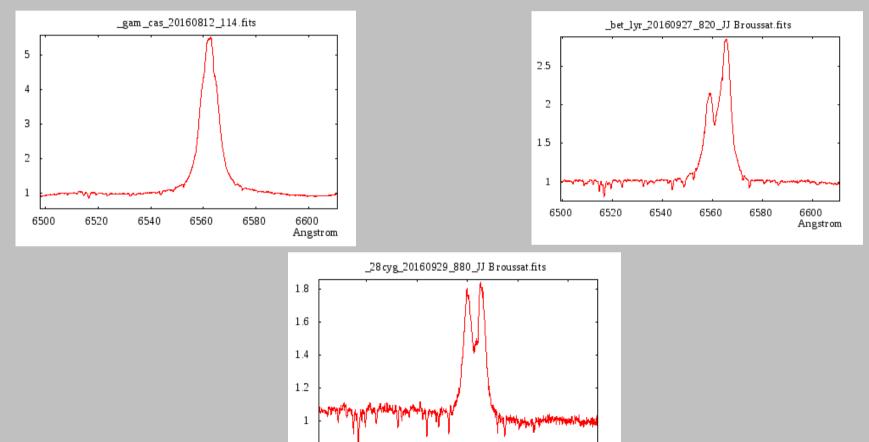
• Validators found the profil was good, but a little noisy because of only 1/2h of poses





#### 2016 and Bess

• The first year I sent spectras in Bess database :





26th of October 2017

6540

6560

6580

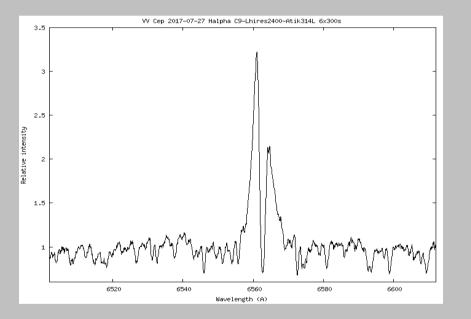
6600 Angstrom

6520

0.8



• At OHP, among other targets, I did VV Cep (another professional/amateur program)









#### Thank you



