

# Results from the white dwarf standard candle working group



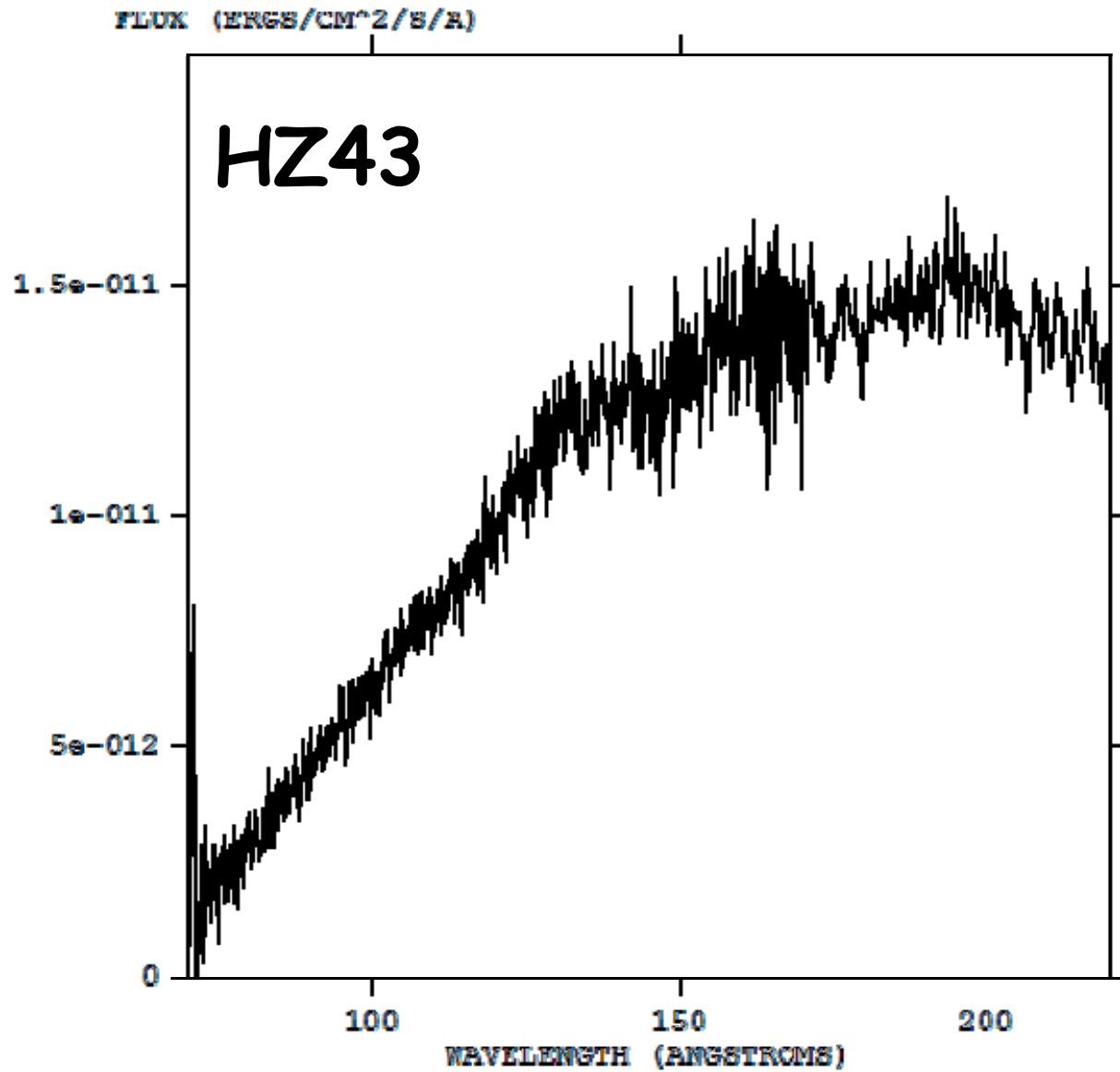
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International Astronomical Consortium  
for High Energy Calibration  
May 19-21 2008, Ringberg Castle



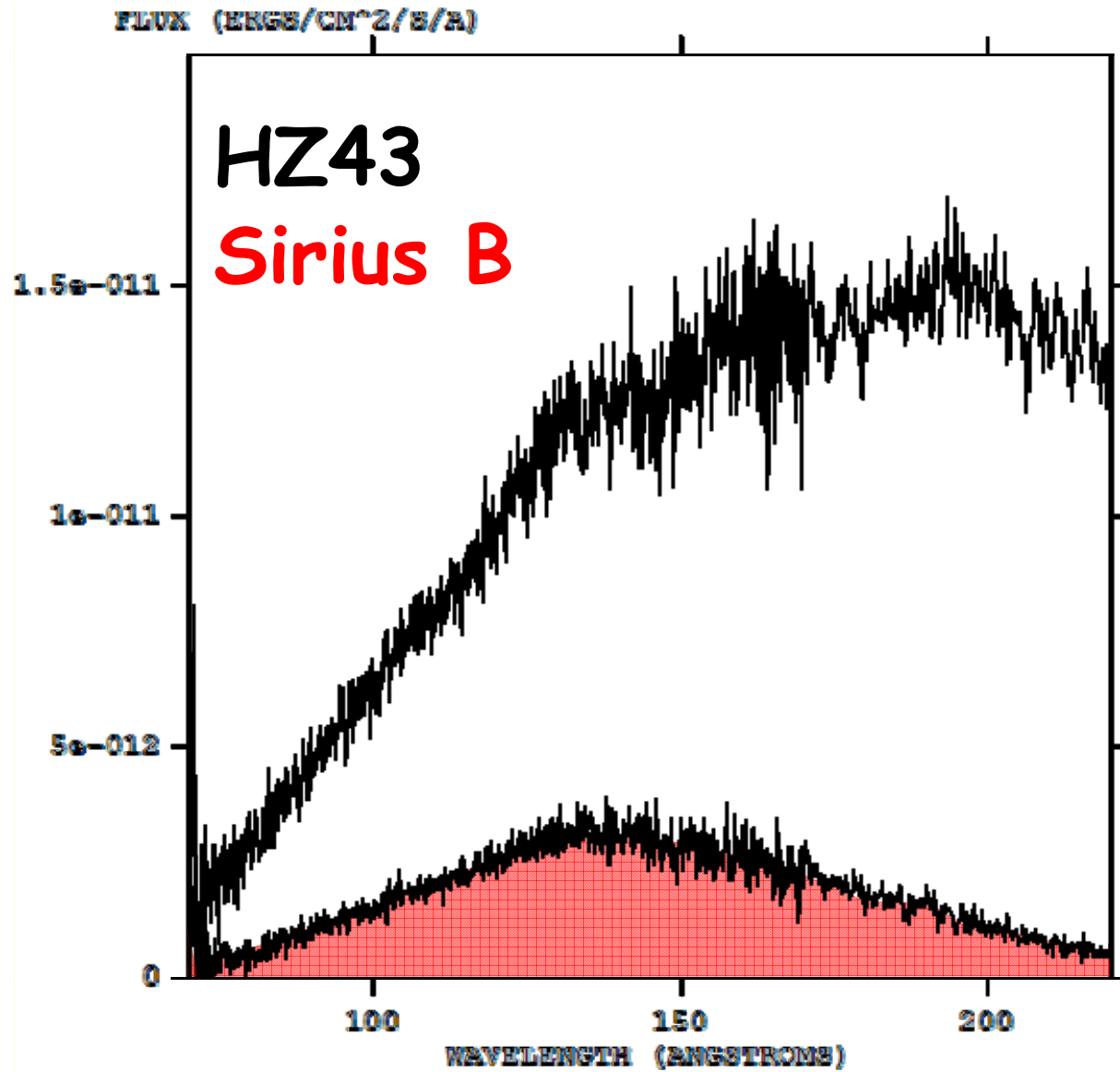
# Summary of points discussed in WG

- Status modeling and fitting of actual data
  - existing observations (HZ 43, Sirius B)
  - models (difficulties
    - TMAP-TLUSTY,
    - Long-short frequency bound-free HI continuum cut-off
- How proceed from here? What is needed?
  - Are the physical models on the right track?
  - LETGS Observations needed:
    - of a further DA white dwarf → GD153
    - good on axis observation → Sirius B



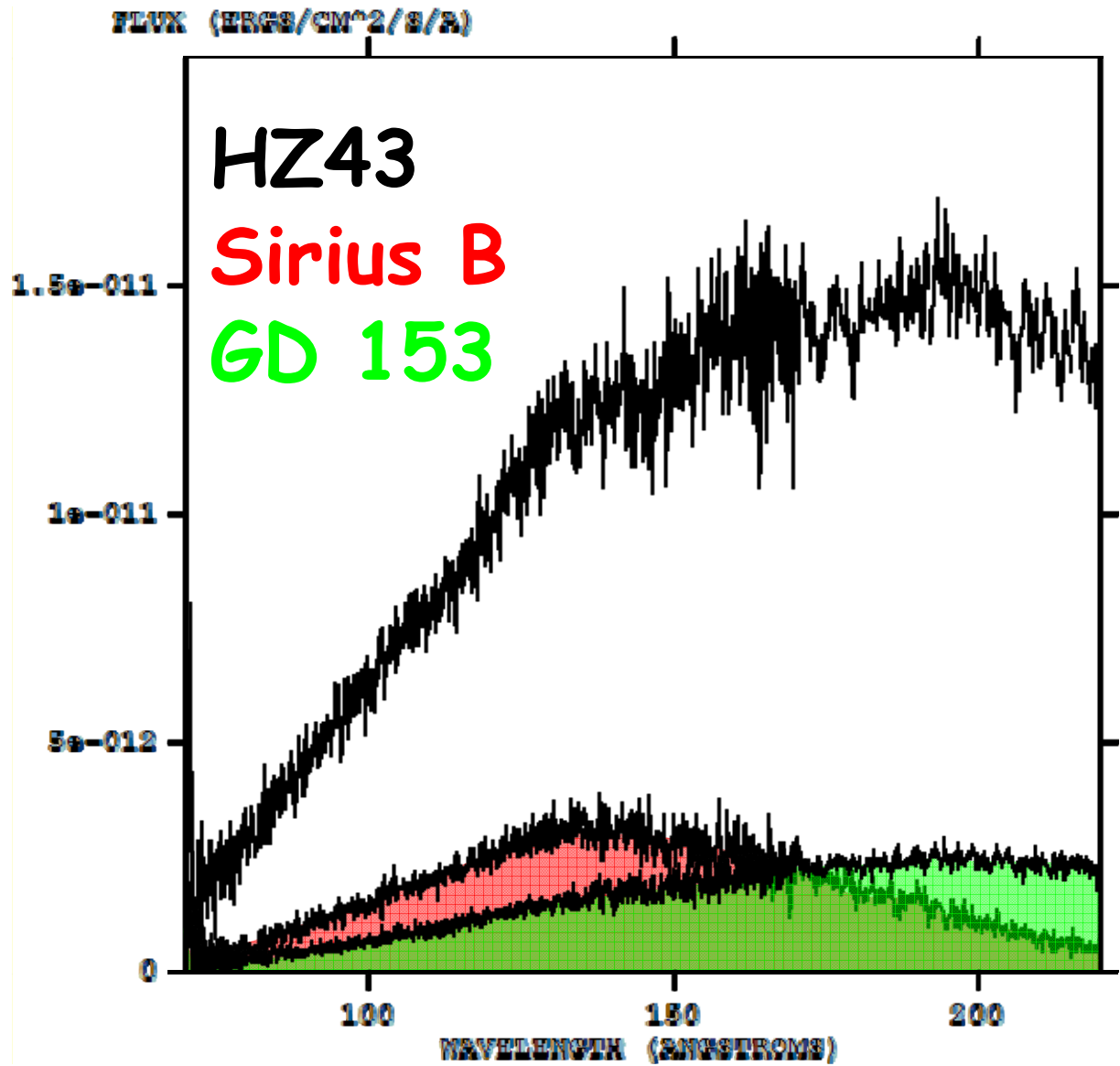
Teff ~ 51100 K  
Log g ~ 7.95  
D ~ 63 pc  
15.3 mas

Chandra LETGS  
Observed every  
6 months



Teff ~ 51100 K  
Log g ~ 7.95  
D ~ 63 pc  
15.3 mas

Teff ~ 24900 K  
Log g ~ 8.6  
D ~ 3 pc  
379 mas



**HZ43**

**Sirius B**

**GD 153**

$T_{\text{eff}} \sim 51100 \text{ K}$

$\text{Log } g \sim 7.95$

$D \sim 63 \text{ pc}$

15.3 mas

$T_{\text{eff}} \sim 24900 \text{ K}$

$\text{Log } g \sim 8.6$

$D \sim 3 \text{ pc}$

379 mas

$T_{\text{eff}} \sim 38000 \text{ K}$

$\text{Log } g \sim 7.87$

$D \sim 69 \text{ pc}$

# Home work

- Talk to members of Chandra LETG calibration Group
- Get observation of proposed GD153 and Sirius B as
  - CAL observations or
  - GO/GTO observations
- Sofar several papers on the topic have come out.
  - New observations will also lead to interesting papers
  - both on Calibration as well as WD atmosphere theory.