

Results from the white dwarf standard candle working group



Vadim Burwitz

International Astronomical Consortium
for High Energy Calibration
April 29, 2009, Shonan Village, Japan



White Dwarf Standard Candle Working Group Members

- Vadim Burwitz (Chair) XMM, Chandra, ROSAT
- Jelle Kaastra LETGS, modeling
- Frank Haberl XMM
- Herman Marshall Chandra
- Jeremy Drake Chandra
- Norbert Schulz Chandra

- External contributors:
 - Klaus Beuermann
 - Thomas Rauch
 - Thierry Lanz

Home work from IACHEC 2008

- Talk to members of Chandra LETG calibration Group
- Get observation of proposed GD153 and Sirius B as
 - CAL observations or
 - GO/GTO observations
- So far 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.

**GD153 110ks LETGS
GTO obs. approved**

Kaastra et al 2009, A&A 497 311

Summary of points discussed in WG

- Status modeling and fitting of actual data
 - existing observations (HZ 43, Sirius B)
 - models (difficulties)
 - TMAP-TLUSTY compare for GD153
- How proceed from here? What is needed?
 - Are the physical models on the right track?
they sofar yield good results
 - LETGS Observations needed:
 - of a further DA white dwarf → 110ks GD153 approved
 - good on axis observation → Sirius B now available

Home work

- Discuss possible Chandra LETGS improvements with Chandra calibration Group
 - influence of new HRMA effective areas ...
- Analyse recent LETGS data on
 - Sirius B (50ks on-axis and 50ks off-axis observations)
- GD153 110ks observation in the queue
 - Prepare grid of models (Lanz, Rauch)
 - analyse data as soon as available.
- Provide WD spectra in xspec format on web
- Improve link to iNS RXJ1856