Clusters WG report

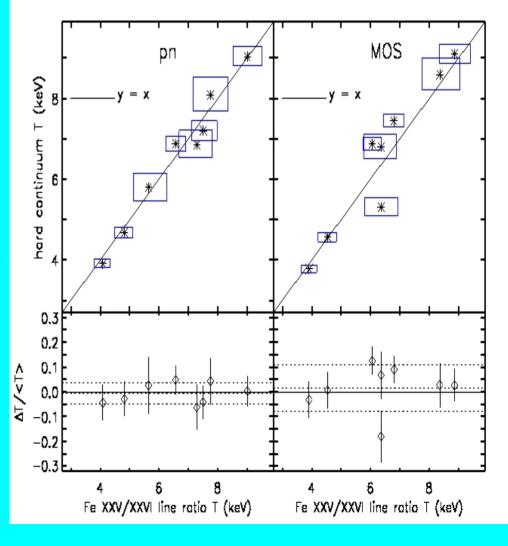
5th IACHEC meeting, Woods Hole 2010

ACIS/EPIC T and flux comparison with other works

- M. Smith: XMM/Chandra Blazar sample:
 - 1.5 4 keV ACIS-S flux ~10% higher than PN, MOS, ACIS joint fit, MOS fluxes 5% higher than PN, similar to ours.
 - Spectral indices consistent in EPIC and ACIS, consistent with our temperature comparison
 - Comparison of 2-7 keV band flux and photon indices of ACIS and EPIC in prep.
- Tsujimoto (G21.5-0.9): in 2.0-8.0 keV band, ACIS flux ~ 10% higher? than PN, ACIS and PN photon index consistent? consistent with clusters
- Plucinsky SNR 1E0102.2-7219: soft band, TBD

What is missing before the paper can be submitted?

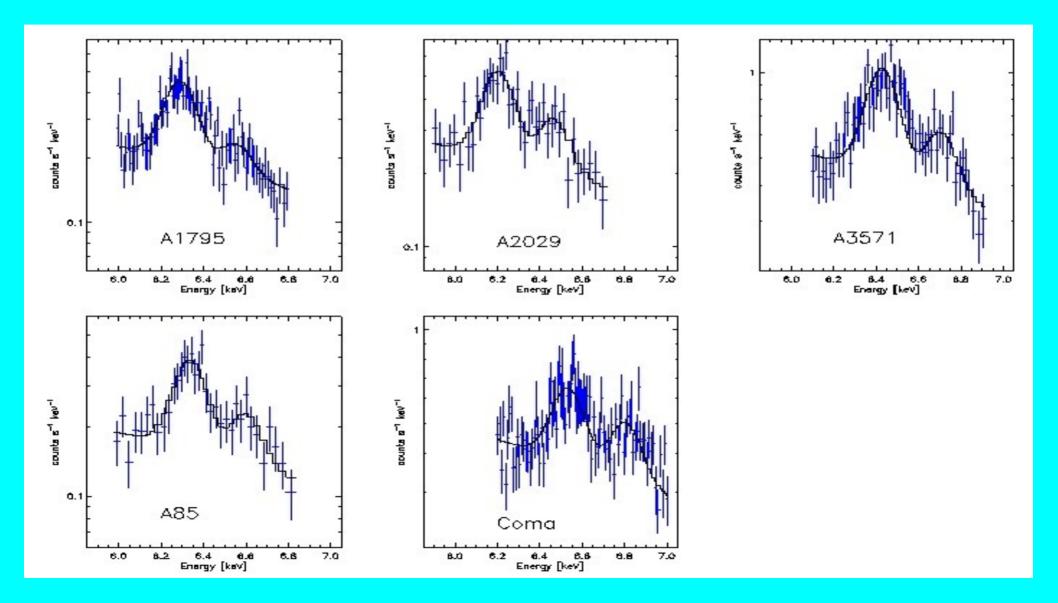
- Editing and some additional figures
- Definition of a standard candle?
 Does cluster hard band fulfill those criteria?
- Fe XXV/XXVI systematics
 details cross-check with Molendi
- Submitted by the end of May



What next?

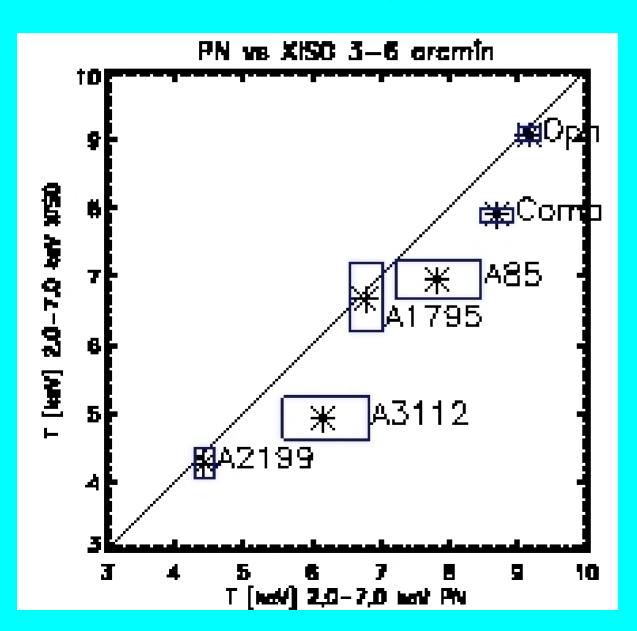
- Twiki
- Re-analysis of the sample after significant calibration updates
- Extend the sample

• Deeper observations of the hottest clusters for better statistics for the FeXXV/XXVI lines. Why?



• Suzaku XIS (E. Miller)

T. Lehto in prep.



- Atom physics with clusters?
- 20% uncertainties in atom physics yield a factor of 2 difference in temperature for a given Fe XXV/XXVI line ratio (R. Smith)
- Cluster FeXXV/XXVI temperatures agree with the bremsstrahlung temperature within a few *%*→ could constrain some of the assumptions?