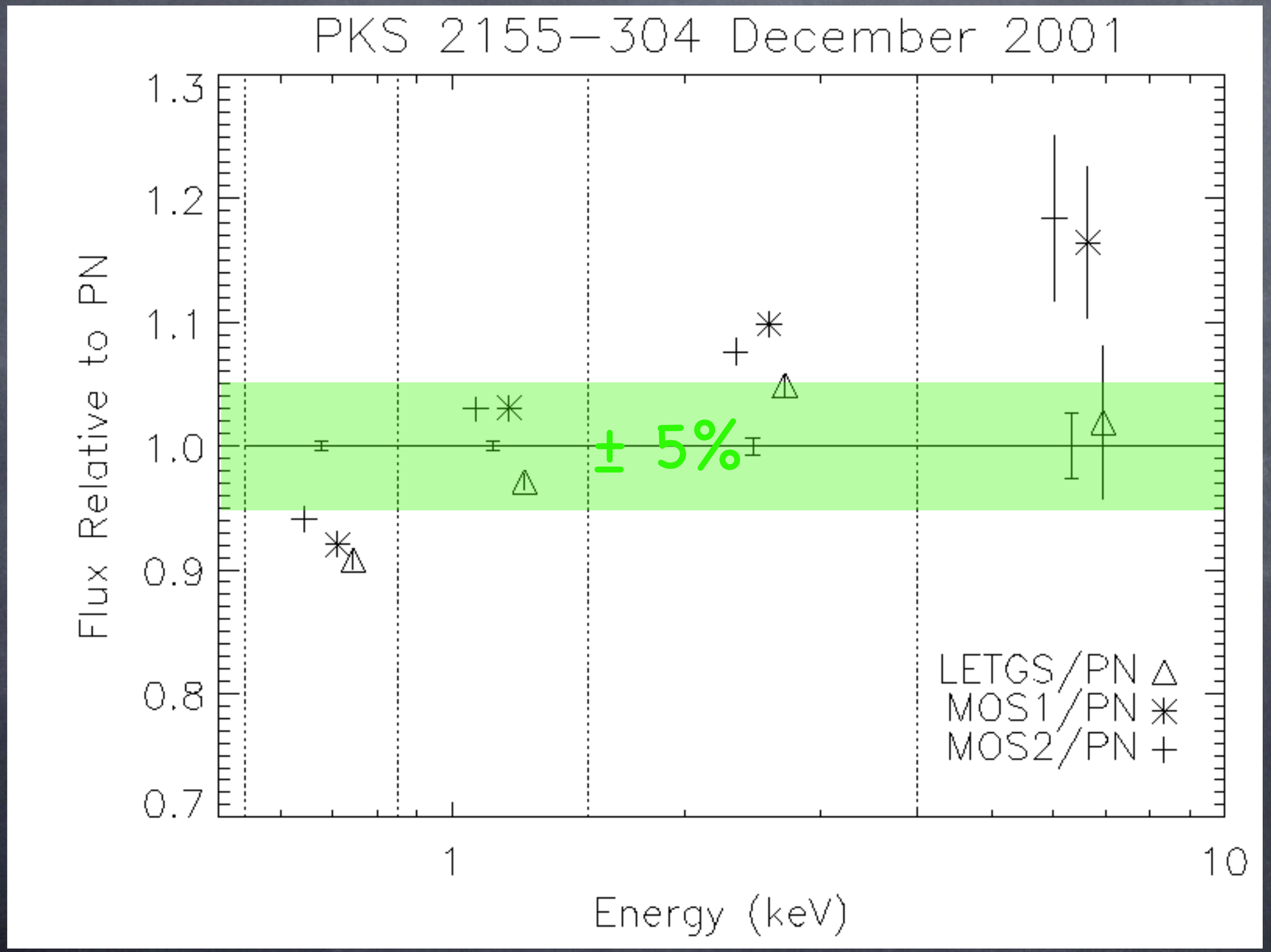
Comparing Fluxes in Bandpasses

Herman L. Marshall
MIT Kavli Institute

Bandpass Flux Measurement Methods

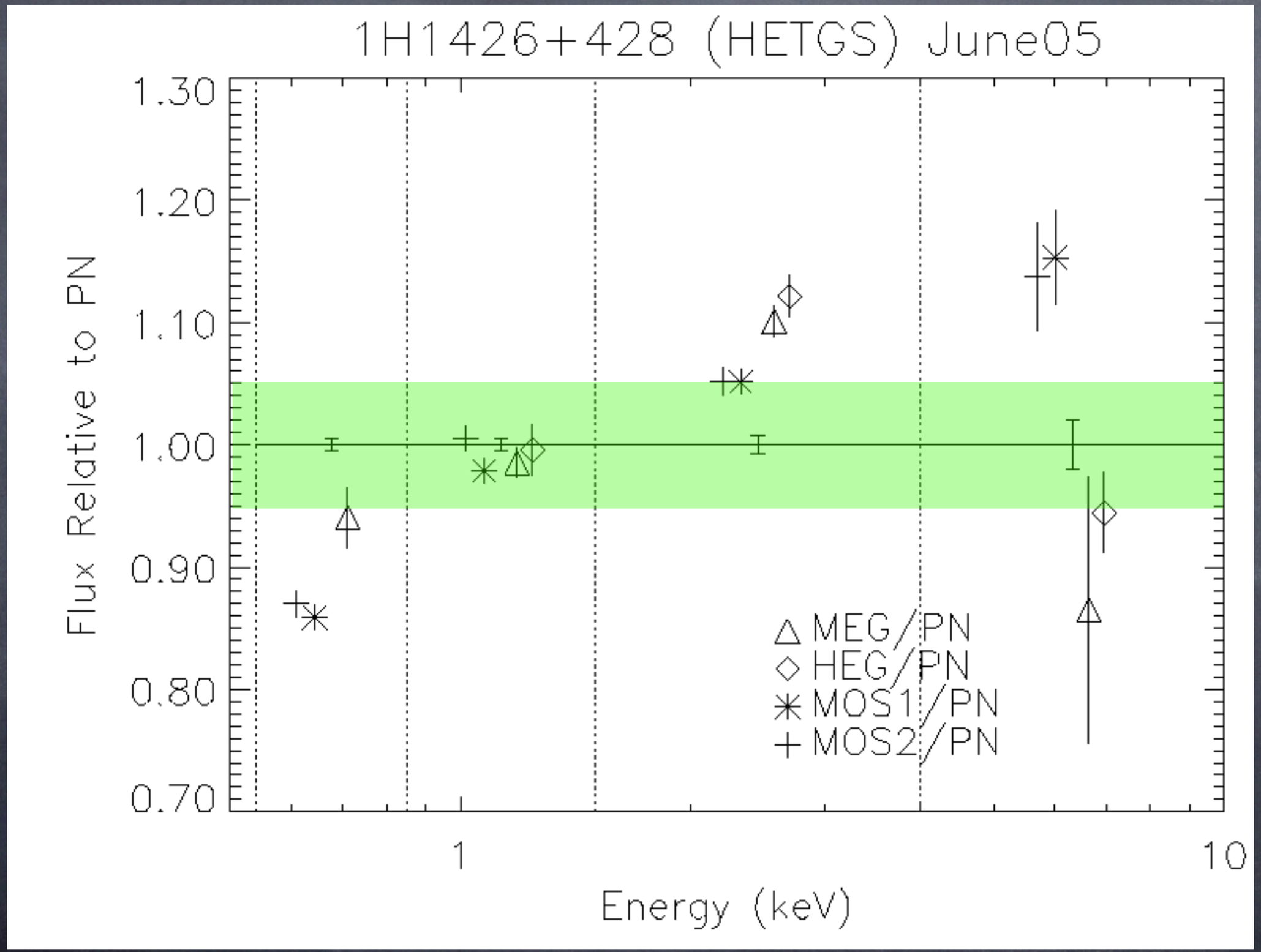
- Fit global model, compute flux from model (xspec)
- Fit model in band, compute flux in band from model (xspec)
- Sum fluxes for grating resolution elements
  - feasible due to narrow spectral response

Prev. Flux Comparisons

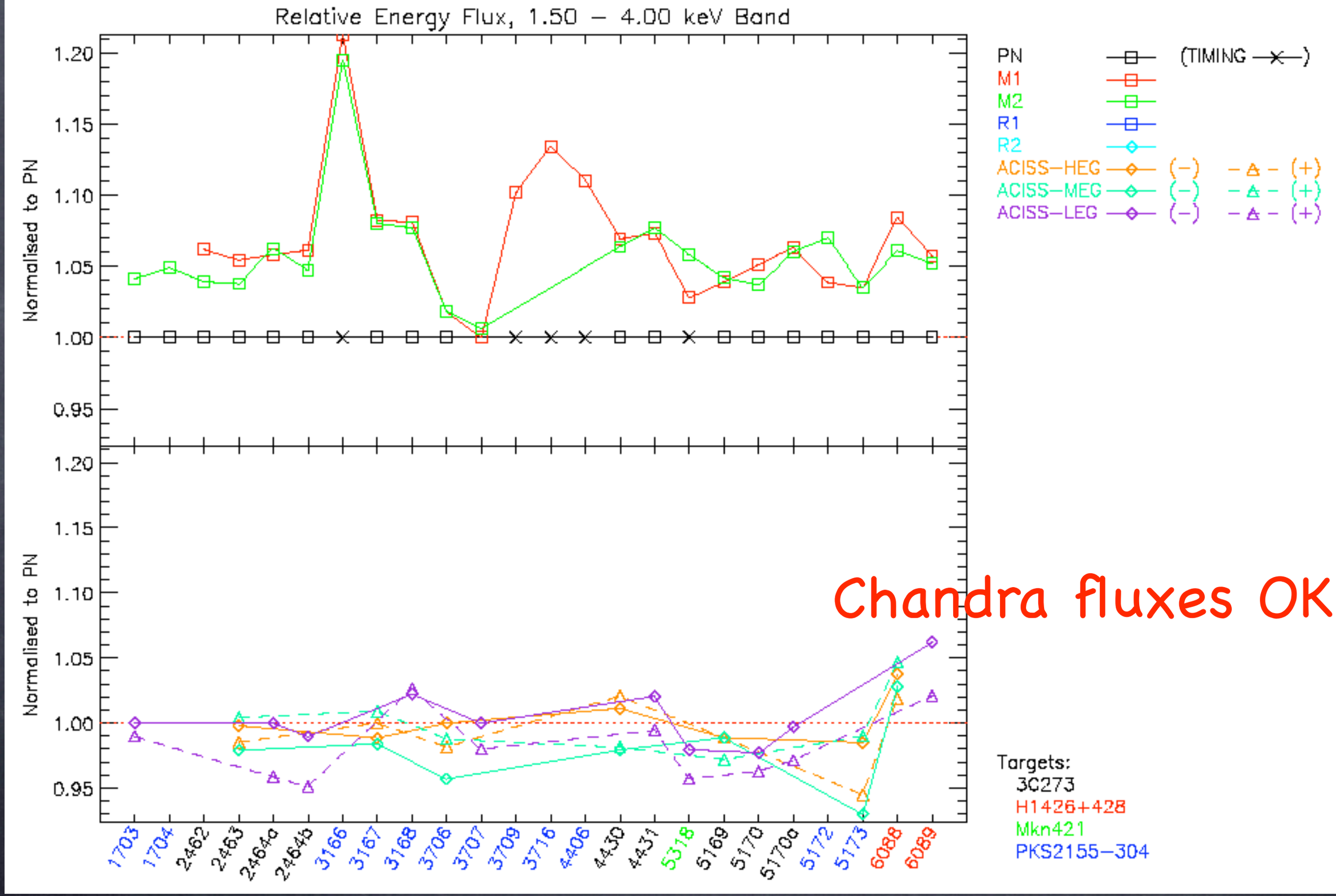


From HLM presentation in Mallorca, 2006

Prev. Flux Comparisons

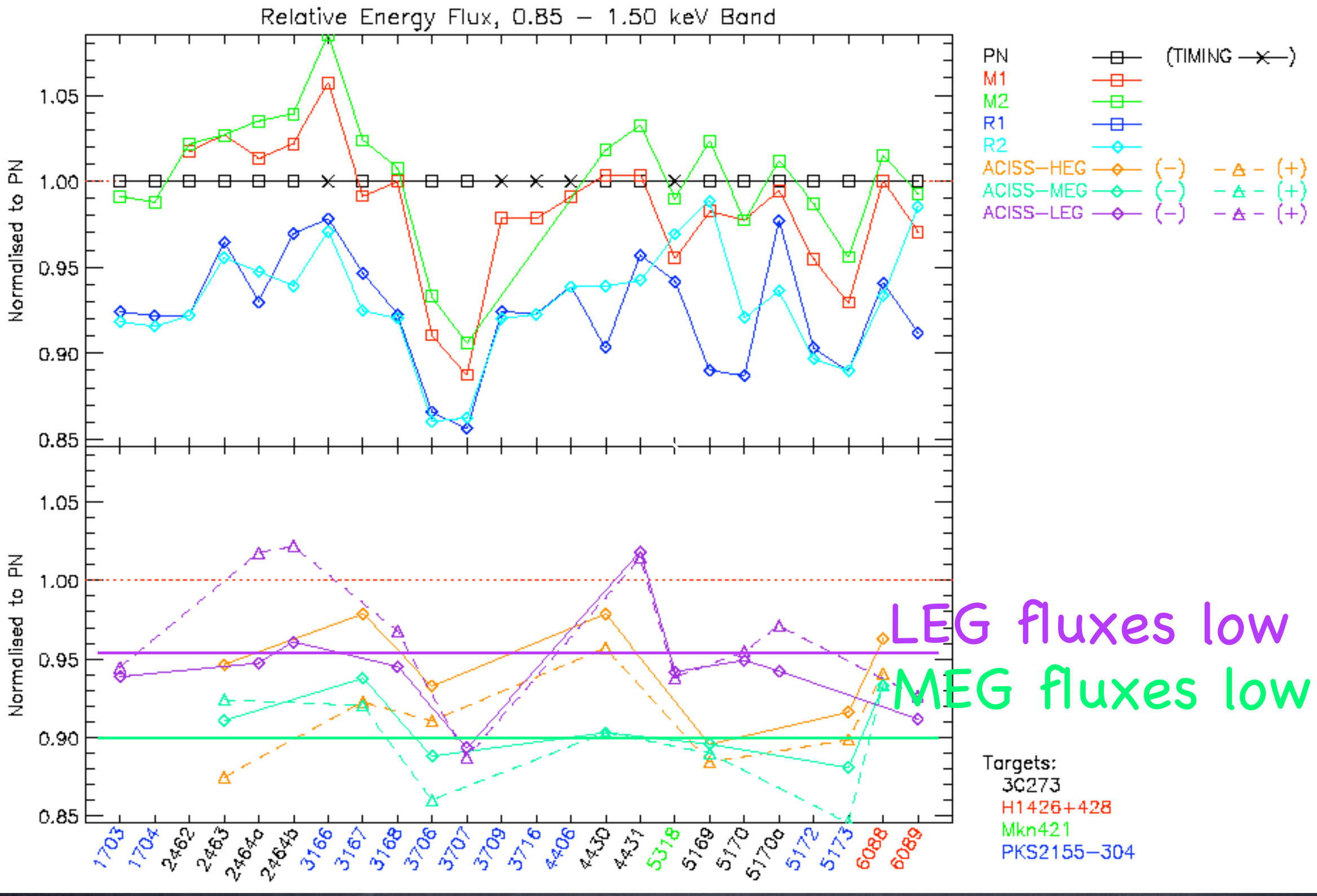


From HLM presentation in Mallorca, 2006



Chandra fluxes OK

From Michael Smith's analysis



From Michael Smith's analysis

Comparing Fluxes

- Compare to values from 8-10 global fits
- 0.54-0.85 keV band: LEG direct fluxes are 15% low; MEG agrees to 1%
- 0.85-1.50 keV band:
  - LEG direct fluxes are 7% low
  - MEG and HEG fluxes are both 2-3% low
- 1.50-4.00 keV band
  - LEG direct fluxes are 1% low -- OK
  - MEG and HEG fluxes are w/in 1% — OK
- Fluxes differ by 5-10% (stat <= 1%)
- HLM action: check LETGS results