

# MOS / PN energy scale on N132D & Cas A

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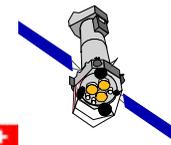
***XMM-Newton***

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# N132D

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- **SAS v5.3 alpha used**
- **pn lower by 15-20 eV up to 2.5keV, in 2 revs and 2 modes.**
  - ==> pn is probably under-correcting even more than MOS.
- **But at low energies S. Zavlin is reported line centroid positions much higher: are we using the same SAS at SOC and Garching ?**



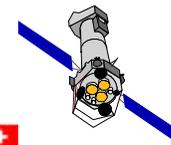
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# Cas A (hot spot)

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- **SAS v5.3beta used**
- **Shift between pn and MOS increasing with energy up to 50eV a 6.6keV**
- **pn SW and full-frame energy scale are consistent.**
  - Timing returned energies completely out (lower)
- **Some small impact on the power index ? as this effects tends to harden the spectrum**



***XMM-Newton***

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