Poster No. 23:

In-orbit Neutron Background of the Hard X-ray Imager onboard Hitomi

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Aim:

Understanding in-orbit **non X-ray Background** produced by atmospheric neutrons, which have significant contribution to entire background.

Results :

- Screened background data had **a positive correlation with the cosmic-ray flux** in orbit.
  → The data was dominated by atmospheric particles.
- Extracted atmospheric particle background **data was explained well by simulated spectrum of atmospheric neutrons.**
- Revealed the contribution of neutron background for the first time.