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Title: Robust Measurement of Iron Plasma Parameters in Tycho's Supernova Remnant

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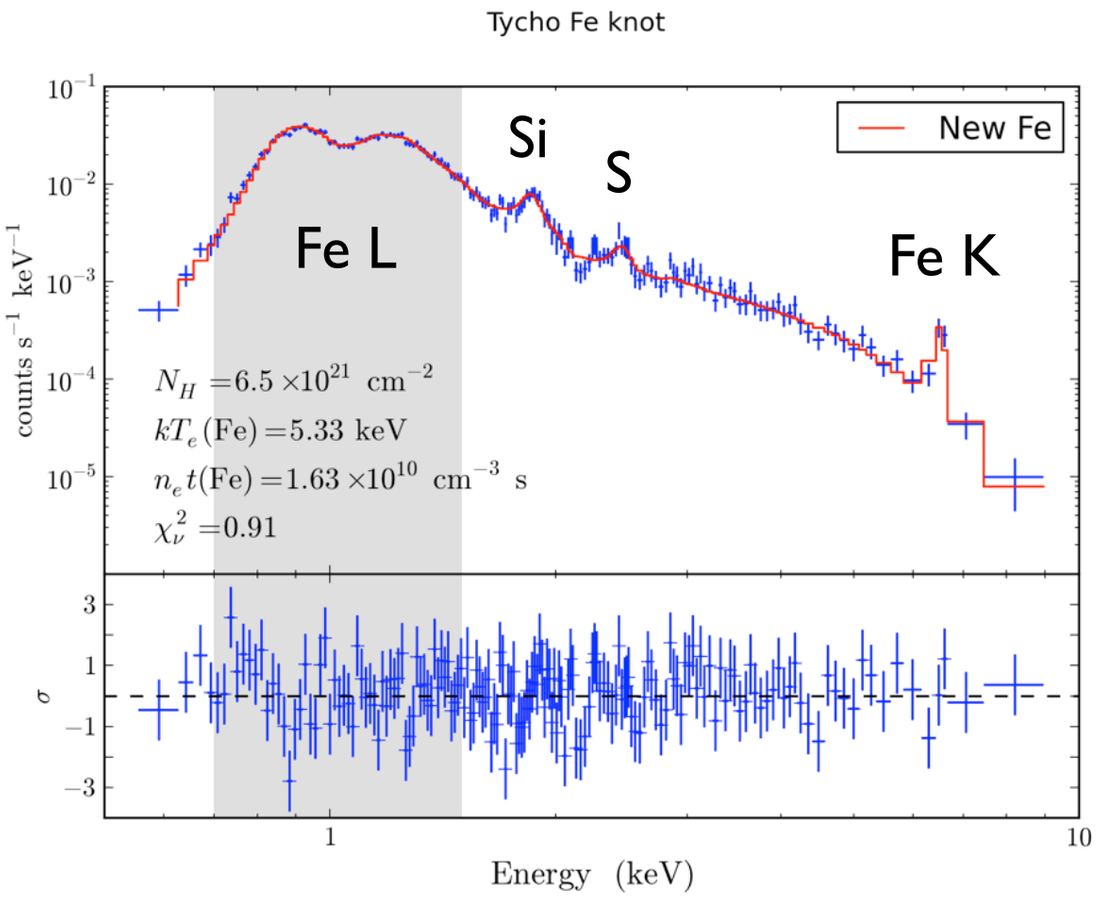
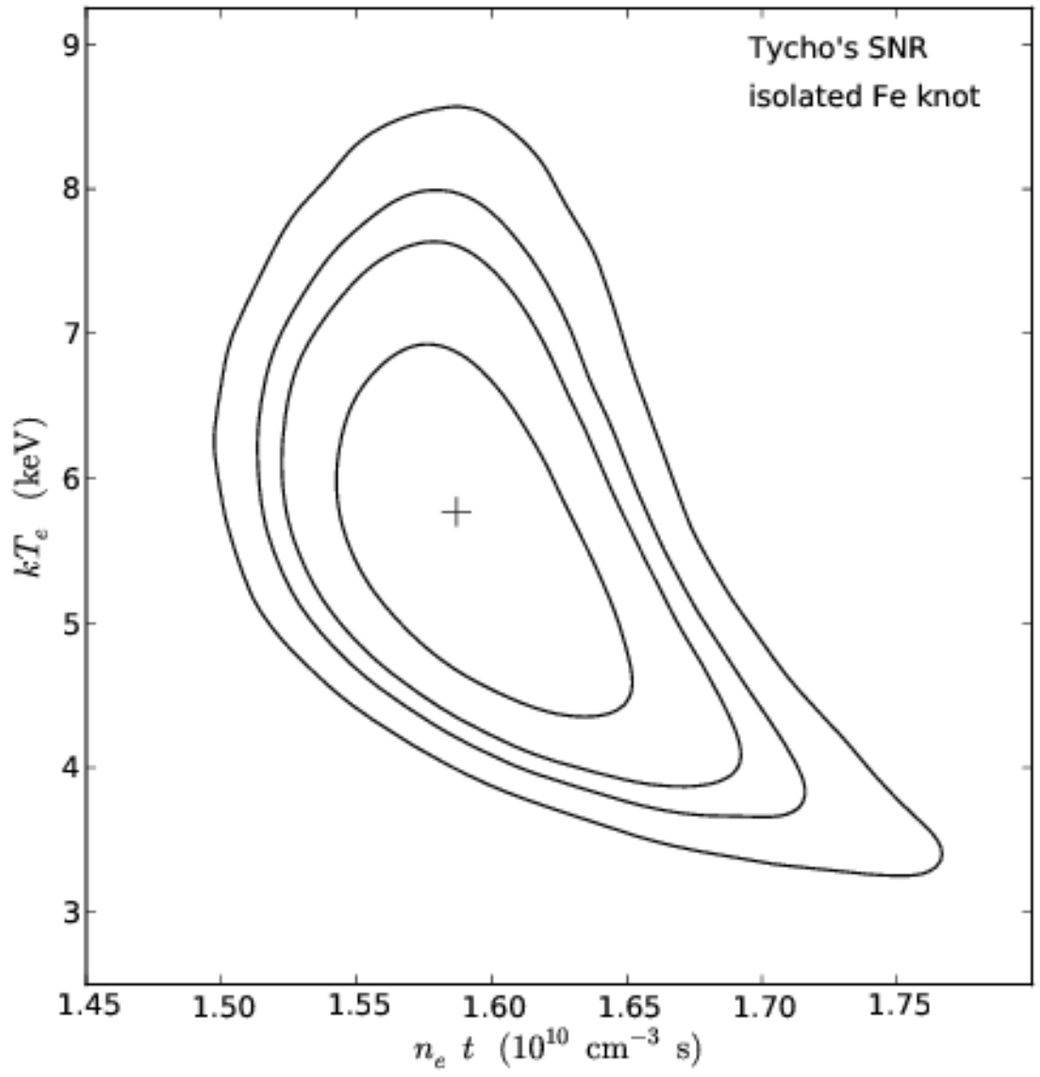
Robust Measurement of Iron Plasma Conditions in Tycho's Supernova Remnant





- New atomic data (K. Eriksen XTD-6, C. Fontes XCP-5, J. Colgan T-1, allows for first time high confidence measurement of Fe T_e and ionization from astrophysical X-ray spectra, important for models of SN Ia
- Markov Chain Monte Carlo parameter estimation on IC machines will allow measurements in thousands of locations in Tycho's SNR, will feedback on SN Ia explosion mech. and 3D sims

K. Eriksen (XTD-6)

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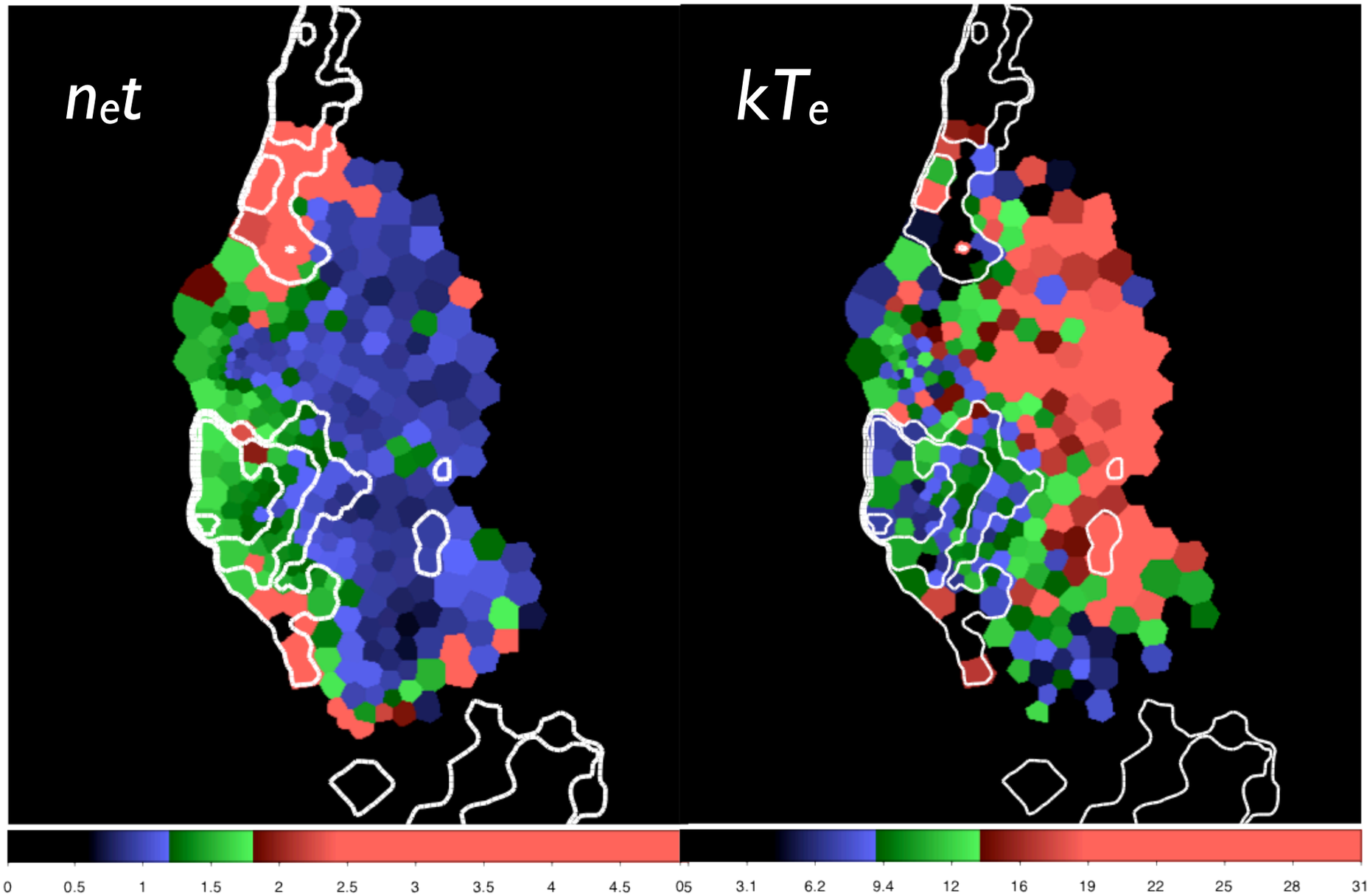
Plasma Parameters in Fe-rich region of Tycho



- Temperature and ionization age from 300+ Chandra X-ray Observatory spatially-resolved spectra in a small portion of Tycho. Mapache runs in the upcoming year will extend to 4000+ spectra over the entire remnant.

K. Eriksen (XTD-6)

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