

New evidence of EIBS & IINF model on energy release in solar flare

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Abstract

I developed a model named “electron-ion bound state and its introducing nuclear fusion” (EIBS & IINF) in 1994. It met thoroughly and widely doubt. The EIBS & IINF model give the idea for solar flare energy release as following: these are two independent processes of emission in solar flare: p-e-p \sim 12.5keV soft X-ray and p-e-A⁺ \sim 25keV are source of soft X-ray (< \sim 12.5keV or 25keV) mainly, d⁺-e-d⁺ \sim 25keV and (d, d) fusion (and secondary reactions) producing γ -ray are source of hard X-ray (> \sim 13keV).

Widely accepted Neupert effect model or “evaporation model” or “thick target model” is contradiction to observations.

New observations by BATSE SPEC and LAD, especially by RHESSI provide firmly evidences indicating that the EIBS & IINF model is suitable to explain the mechanism of energy release in solar flare.

Reference

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