Solar luminosity in erg s

A popular model for Type Ia supernovae (SNe Ia) is the detonation of a CO white dwarf (WD) that is triggered by the prior detonation of a thin surface layer of helium, known as a double ...

The luminosity of these explosions is significantly higher than typical supernovae, reaching peak values exceeding 10 45 erg/s. The simulations indicate that these SMS explosions could reach ...

o Converting from absolute magnitude to luminosity in solar units o A reduction of 5 in magnitude corresponds to an increase in a factor of 100 in luminosity, as it should o If a star has absolute ...

It"s position on the diagram gives us it"s absolute magnitude. Compare this with the absolute magnitude of Sun, which is 4.8 and deduce it"s luminosity relative to solar luminosity, ...

Our derived accretion disc luminosity, log (Lacc /erg s -1)= 45.19 0.11 + 0.12 , is moderately high yet still uncertain. We highlight that deviations between bolometric luminosity calibrations and ...

SNe IIn span broad ranges in peak luminosity (~1e42-1e44 erg/s) and timescales (~20-300 days above 50% of peak luminosity); however, our key finding is that SNe IIn divide into two clear ...

However, the ratio of X-ray luminosity to star formation rate shows an anti-correlation with metallicity in 5 out of 9 X-ray detected sources, implying ultraluminous X-ray sources are key ...

Under the assumption of an incompressible fluid, they estimated the core erosion rate as M core ? 0.3 L (R / G M), where M and R are the planet"s mass and radius, respectively, G is the ...

The predicted X-ray luminosity of ~ 10 36 erg s 1, dominated by the hot (T ~ 10 7 10 8 K) plasma within 0.2 parsec of the SMBH, is well consistent with Chandra observations. We conclude ...

The peak luminosity is 3 × 10 43 erg s 1, which is about 40 times more luminous than the Ni 56 -powered peak. 3 × 10 49 erg of radiation energy is released within 30 days after explosion, ...