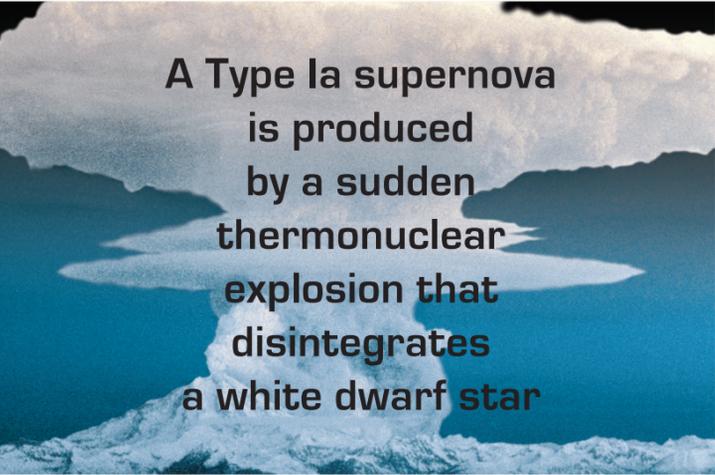


SUPERNOVA

Every 50 years or so, a massive star in our galaxy blows itself apart in a supernova explosion

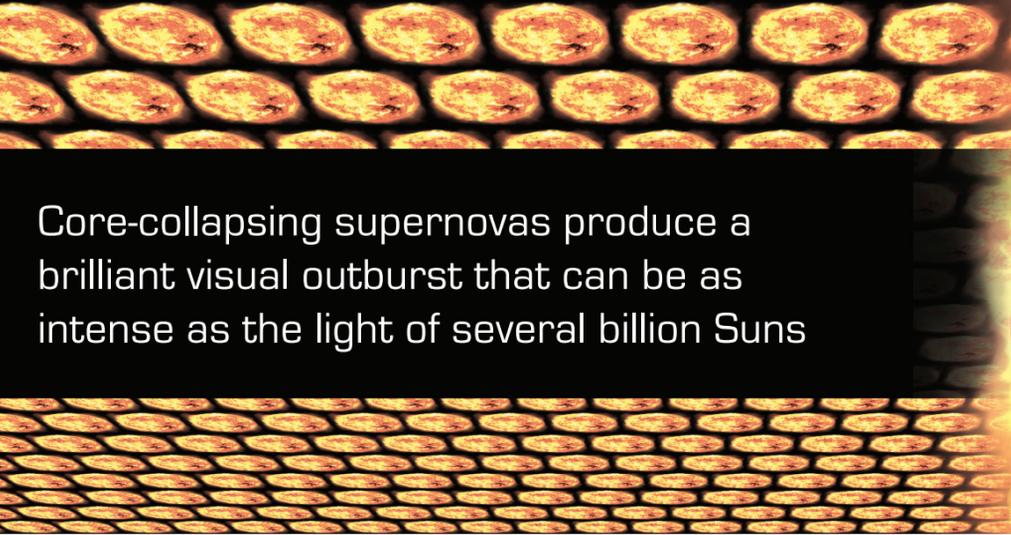


A Type Ia supernova is produced by a sudden thermonuclear explosion that disintegrates a white dwarf star

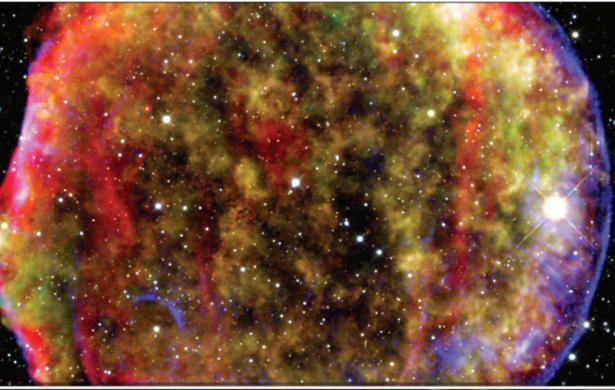


Supernovas are one of the most violent events in the Universe, and the force of the explosion generates a blinding flash of radiation, as well as shock waves analogous to

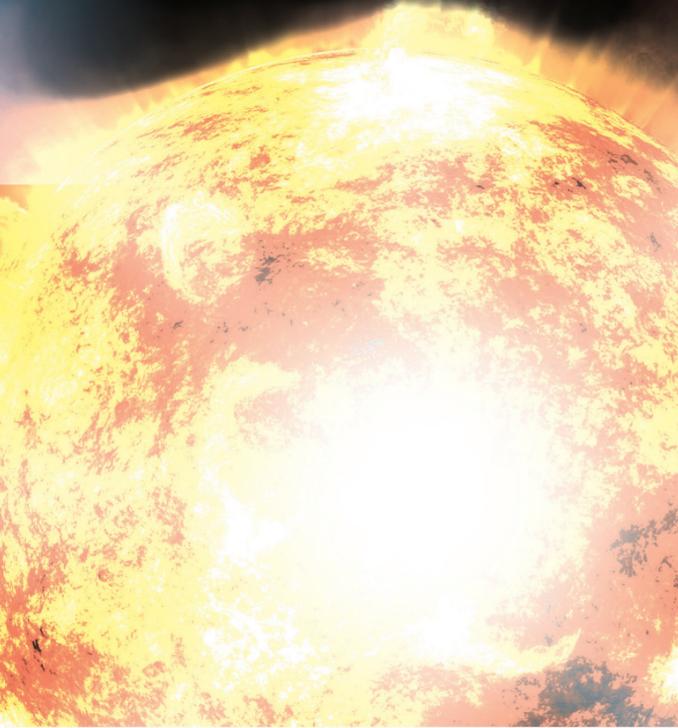
SONIC BOOMS



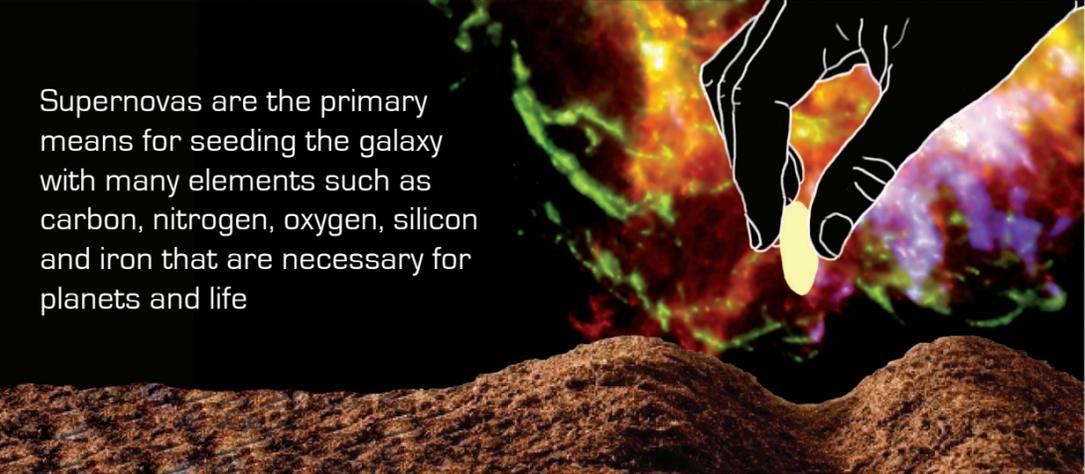
Core-collapsing supernovas produce a brilliant visual outburst that can be as intense as the light of several billion Suns



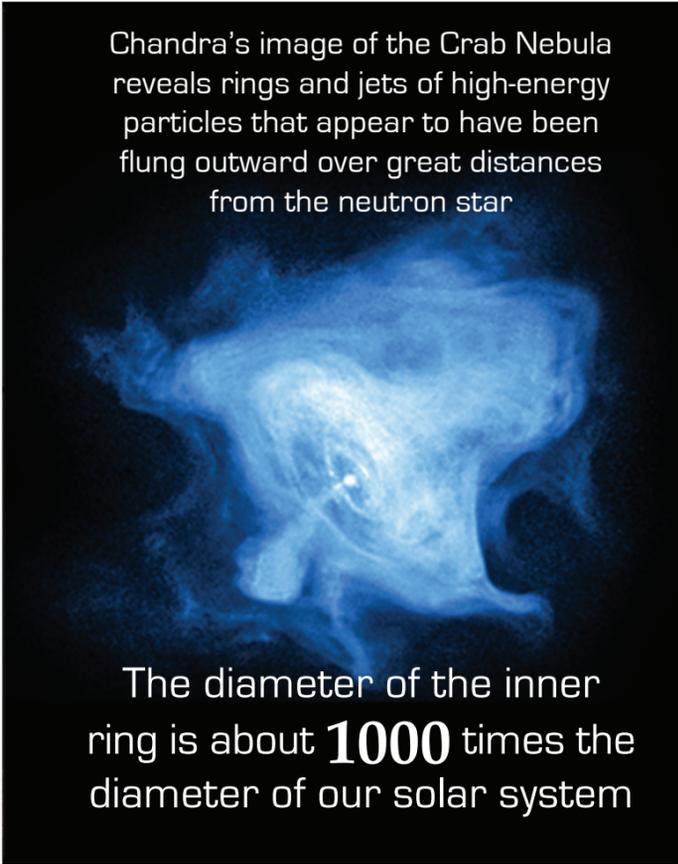
Tycho's supernova, observed in 1572, was so bright that it was visible during the day



Chandra's image of the Crab Nebula reveals rings and jets of high-energy particles that appear to have been flung outward over great distances from the neutron star



Supernovas are the primary means for seeding the galaxy with many elements such as carbon, nitrogen, oxygen, silicon and iron that are necessary for planets and life



The diameter of the inner ring is about **1000** times the diameter of our solar system

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