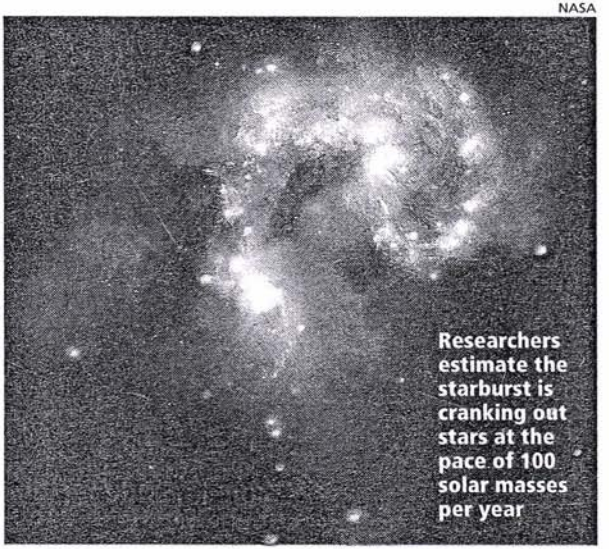
Pune Mirror, Thurusday, 25th Nov, 2010, P. 10

Two galaxies collide, resulting in starburst

NASA



Researchers estimate the starburst is cranking out stars at the pace of 100 solar masses per year

LONDON: Astronomers have spotted what they say is the brightest ever starburst that beams out as much infrared light as an entire galaxy. The collision of two spiral galaxies has triggered this explosion, which is cloaked by dust that renders its stars nearly invisible in other wavelengths of light. The starburst newly revealed by the Nasa Spitzer telescope stands as the most luminous ever seen taking place away from the centres of merging parent galaxies, the *Daily Mail* reported.

The buried starburst was located in the interacting galaxies known as II Zw 096 and is expected to continue to unfold for a few hundred million years. Gravitational forces have already dissolved the once-pinwheel shape of one of II Zw 096's pair of merging galaxies. The ultra-bright starburst region spans 700 light-years or so — just a tiny portion of II Zw 096 which streams across some 50,000 to 60,000 light-years — yet it blasts out 80 per cent of the infrared light from this galactic collision. Based on Spitzer data, researchers estimate the starburst is cranking out stars at the breakneck pace of around 100 solar masses, or masses of our Sun, per year.

In galaxy mergers, individual stars rarely slam into one another because of the vast distances that separate them. The new findings were published in *The Astronomical Journal*. —PTI