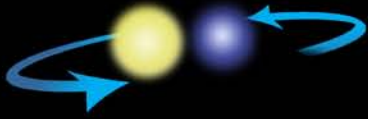


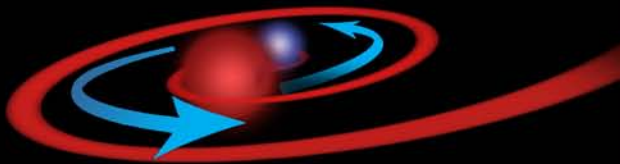
# One theory of the evolution of Supernova 1987A (SN 1987A)

1



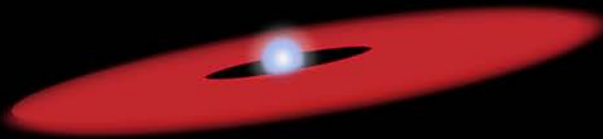
A binary stellar system. The more massive (primary) star evolves first.

2



As the primary star becomes a giant, it engulfs its companion. The core of the primary and the companion are in a "common envelope."

3



As the companion spirals in, it ejects the envelope, mostly in the orbital plane. The companion merges with the core.

4



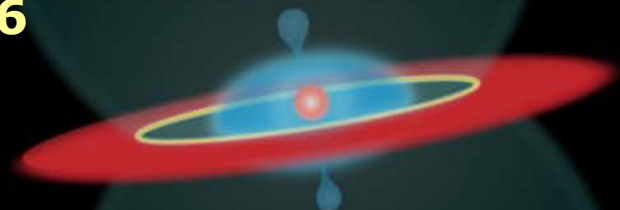
A fast wind from the core interacts with the torus around it, forming a ring of denser material.

5



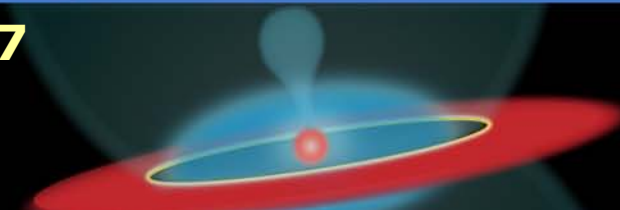
The primary star explodes as a supernova, causing the inner edge of the ring to glow.

6



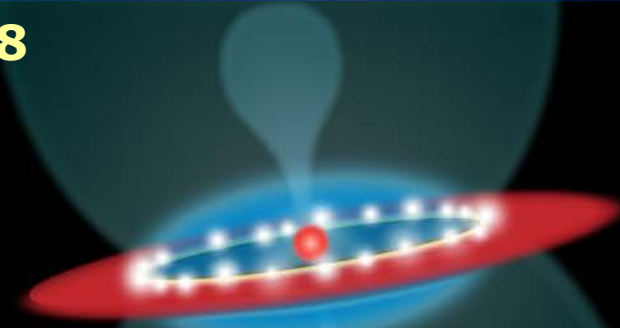
Ejecta from the explosion start to move outward.

7



The bubble of ejecta grows, approaching the inner edge of the disk.

8



The ejecta strike and shock the inner ring at an increasing number of spots, which light up on impact.