

Binary system:
Young high-mass + young pulsar

Termination Shock

Leading edge

Kelvin-Helmholtz instabilities

Shocked pulsar wind

Shocked stellar wind

Trailing edge

Coriolis turnover

Interaction with the medium

Unshocked stellar wind

We don't stop playing because we grow old;
we grow old because we stop playing.
George Bernard Shawar

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Gamma-ray binaries are formed by a young massive star and a young non-accreting pulsar. The collision of their powerful winds produces shocks where particles are accelerated to relativistic energies. This shocked material forms a cometary tail extending away, but, as a consequence of the fast orbital motion, the tail of the flow forms a spiral. These binary systems produce non-thermal emission from radio to very-high-energy gamma-rays.

