

A Brief Review of Binary Driven Hypernova

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Binary driven hypernova (BdHN) models long gamma-ray bursts (GRBs) as occurring in the binary systems involving a carbon-oxygen core and a companion compact star. This model, first proposed in 2012, succeeds and improves upon the fireshell model and the induced gravitational collapse paradigm. After nearly a decade of development, the BdHN model has reached a nearly mature structure. In this talk, on behalf of the group, I will present a summary of the BdHN model and the physical processes at work in each of the episodes during its occurrence and lifetime, and to give examples by GRB 180728A and 190829A.

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