

# $\gamma$ 暴的能源和环境

戴 子 高

(南京大学天文系 南京 210093)

## 摘 要

评述了  $\gamma$  暴能源的某些机制, 比如: 巨超新星爆发、磁白矮星的塌缩、磁星的诞生、中子星의 相变等。重点评述了中心脉冲星의 能量注入和周围环境对  $\gamma$  暴余辉的影响。讨论了将来在  $\gamma$  暴领域的可能研究。

关键词  $\gamma$  暴—机制—余辉

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## Energy Source and Environment of $\gamma$ -ray Burst

Dai Zigao

(Department of Astronomy, Nanjing University, Nanjing 210093)

## Abstract

Mechanisms for the Energy source of  $\gamma$ -ray burst are summarized. This includes: explosion of giant SN, collapse of magnetic white dwarf, birth of magnetic star, phase transition of neutron star. Besides, the influence of energy input of central pulsar and the environment on the afterglow of  $\gamma$ -ray burst are mainly discussed. Finally, some prospective studies on the  $\gamma$ -ray burst in the future are mentioned.

**Key words**  $\gamma$ -ray burst—mechanism—afterglow