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#### Collapsar model for the central engine of gamma ray bursts

Gamma ray bursts (GRB) are ultra-luminous events occurring throught the universe, which flood an almost dark gamma-ray sky for a short period of time, a few to several hundred seconds. The currently accepted interpretation of this phenomenon is that a few solar rest mass worth of gravitational energy is released in a very short period in very small regions in an enormous explosion. It is caused by either the merger of two compact objects or collapse of a massive star. I will review the latter case, generally known as a collapser model of GRB, in my presentation.

#### Biography

Sachiko Tsuruta received her PhD on her studies of neutron stars at Columbia University. She was awarded the 14<sup>th</sup> Marcel Grossamann Award mainly for her PhD thesis work, which predicted that a neutron star is observable before it was discovered. After Harvard University, NASA, Max Planck Institute, etc., she has been at Montana State University, Bozeman, Montana, USA. She served as a committee member (some as the chair) in many international conferences. She contributed to numerous conferences as an Invited Speaker and has published over 300 papers.

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