Soft gamma ray flashes (~0.01 - 1 MeV) that can be observed through space. These are associated with core-collapse supernovae.

**Emission Mechanism**

The predominant model on the origin of short GRBs predicts that they are generated in the merger of a NS and another compact object, NS or BH. The detection of GW170817 (Abbott et al., 2017), gravitational waves coming from the merger of two NS, and the associated short GRB is reinforcing this model, despite some existing uncertainty.

**Short Duration GRBs**

These GRBs are cosmological and the host galaxies are extremely far away. The dominant model on the emission of GRBs is the so-called Fireball model, looking directly down the jet towards the source.

**Gravitational Waves**

Gravitational Waves (GWs) are ripples in the curvature of spacetime that propagate as a wave. These ripples are caused by the acceleration of high mass objects. Gravitational Waves (GWs) are ripples in the curvature of spacetime that propagate as a wave. These ripples are caused by the acceleration of high mass objects. Gravitational Waves (GWs) are ripples in the curvature of spacetime that propagate as a wave. These ripples are caused by the acceleration of high mass objects. Gravitational Waves (GWs) are ripples in the curvature of spacetime that propagate as a wave. These ripples are caused by the acceleration of high mass objects. Gravitational Waves (GWs) are ripples in the curvature of spacetime that propagate as a wave. These ripples are caused by the acceleration of high mass objects. Gravitational Waves (GWs) are ripples in the curvature of spacetime that propagate as a wave. These ripples are caused by the acceleration of high mass objects. 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The advantage of the gravitational waves is that they allow us to directly study the collapsed star core, whereas the electromagnetic spectrum can be obscured by several factors, such as dust and ejected material.

**Identification of Potential Newly Formed Magnetars**

Identifying Potential Newly Formed Magnetars from Gamma-ray Bursts

**Deven Bhakta**

**Mentor:** Dr. Alessandra Corsi

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**References:**

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