

Relativistic Beaming and Luminosity Distribution in Gamma-Ray Bursts.

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We test a relativistically beamed GRB model with strong source evolution mimicking cosmic star formation activities. We constrain beaming-induced luminosity distribution. The maximum luminosity and the width of the luminosity distribution are also constrained. If we interpret the resulting luminosity distribution as due to relativistic beaming, the intrinsic luminosity and the bulk Lorentz factor of the standard source are strongly constrained.