Annual NewCompStar Conference 2016



Contribution ID: 49

Type: not specified

Quark Deconfinement in the Context of the Millisecond Magnetar Model for GRBs

Tuesday 26 April 2016 11:20 (50 minutes)

The properties of late time activity in Long and Short GRBs, point strongly toward a long lived energy injection mechanism. The millisecond magnetar model provides naturally with such input in the form of a relativistic magnetically driven wind. The standard pictures however predicts a steady smooth injection, that looks at odds with the presence of late time bursts observed in the light-curve of several events. Among the possible explanations it has been suggested that a phase transition in the newly born magnetar, and in particular quark deconfinement, could be at the origin of those events. We present here a study of the timescales and energetic properties expected for such events, in the context of the millisecond model for GRBs.

Author: Dr BUCCIANTINI, Niccolo Presenter: Dr BUCCIANTINI, Niccolo Session Classification: Plenary Talk