Abstract Submitted for the APR07 Meeting of The American Physical Society

GRB060218: another example of GRB-Supernova connection MARIA GIOVANNA DAINOTTI, MARIA GRAZIA BERNARDINI, CARLO LUCIANO BIANCO, LETIZIA CAITO, ROBERTO GUIDA, REMO RUFFINI, ICRANet and Dipartimento di Fisica - Università di Roma "La Sapienza" — We study the Gamma-Ray Burst (GRB) 060218 related to SN 2006aj. This source appears to be a very soft burst, therefore interpreted as an X-Ray Flash (XRF). We successfully fit the entire set of X- and gamma-ray observations by Swift of GRB 060218 in the 0.3-150 keV energy band during the entire time of observations within a unified theoretical model. We make as well definite predictions about the spectral distribution in the early part of the light curve. By our fit we show that there are no basic differences between XRFs and more general GRBs.

Maria Giovanna Dainotti ICRANet and Dipartimento di Fisica - Università di Roma "La Sapienza"

Date submitted: 15 Jan 2007 Electronic form version 1.4