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GRB 190114C: from prompt to afterglow?

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I will present the interesting case of GRB 190114C, the first GRB ever detected by MAGIC at Very High Energy (VHE). We analyzed the spectral evolution of its gamma-ray emission as detected by the Fermi Gamma-Ray Burst Monitor (GBM) up to~60 s. We revealed the presence of an extra component starting on ~4 s post-trigger. This extra component rises and decays quickly (peaking at~6 s) and it is characterized by a non-thermal spectrum that can be fit by a power law. We interpret this additional component as due to the afterglow of the burst. The onset time allows us to estimate the initial jet bulk Lorentz factor Gamma0 which is ~ 130-700, depending on the assumed circum-burst density profile.

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