

FIR Observations of the Host Galaxy of GRB 110422A with *Herschel*

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The *Herschel* far infrared (FIR) space observatory was designed to study the cold universe by observing continuum emission from dust below $\sim 50K$ in the local universe, and from relatively warmer dust at higher redshift up to $z \sim 4$. Although the in-orbit operations of *Herschel* has ended, the exploitation of *Herschel's* legacy data has but just started. I give a brief report of our observations of the Gamma-ray burst (GRB) 110422A at $z \sim 1.77$ with the PACS and SPIRE instruments on-board *Herschel*, a first time in the $60 \mu\text{m} - 600 \mu\text{m}$ FIR wavelength range. The host galaxy of the GRB is identified in *Herschel* images. Fitting the FIR SED we derive dust temperature, dust mass, and gain insight of other properties of the host galaxy.