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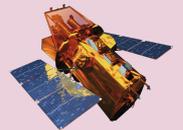
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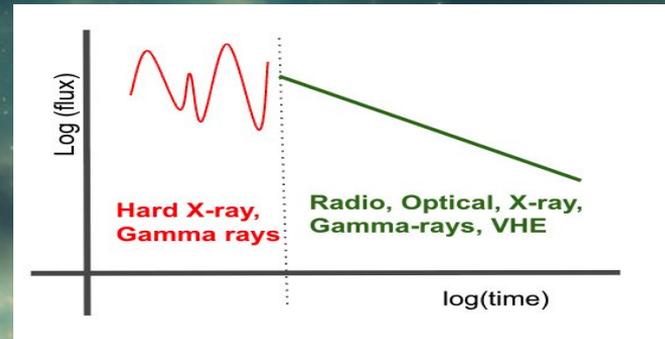
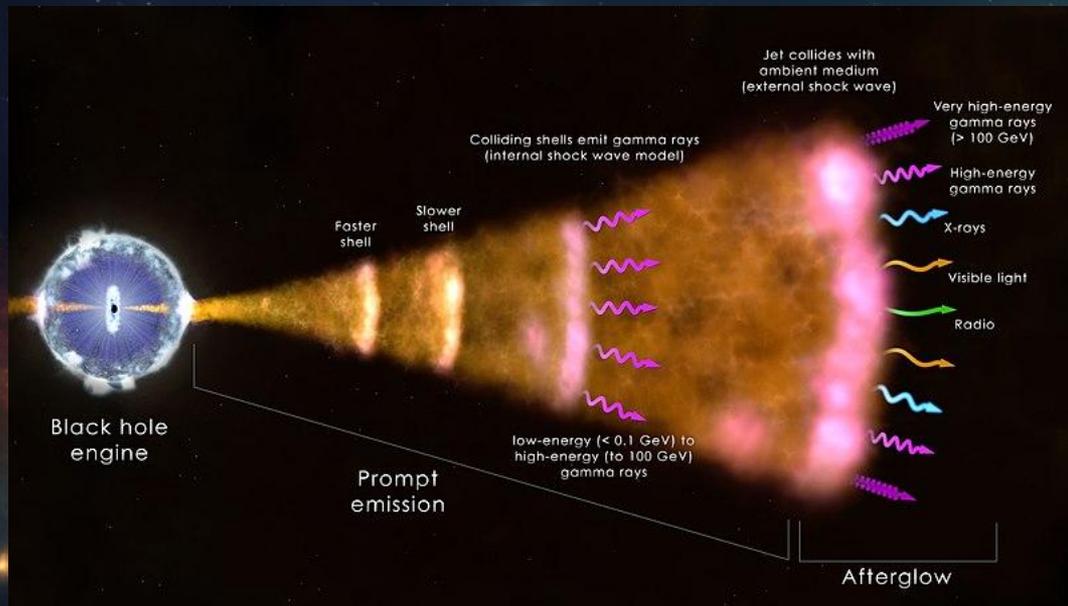
Research Interest: Multi-wavelength/Messenger Study of Transients

Expertise

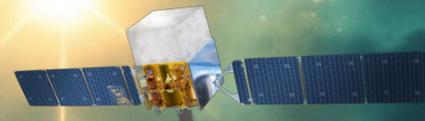
- Gamma-Ray Bursts - (Phenomenology and Modeling)
- Data Analytics
 - a. Swift X-ray Telescope (0.3-10 keV)
 - b. Swift Burst Alert Telescope (15-150 keV)
 - c. Fermi Gamma-ray Burst Monitor (~keV - MeV)
 - d. Fermi Large Area Telescope (0.1-100 GeV)
 - e. *Gammapy/Tilepy* for VHE Telescopes (> 100 GeV)
- Gravitational waves searches with pyGRB and XPipeline



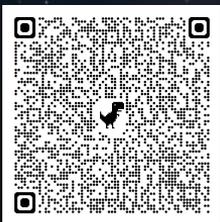
Multi-Wavelength View of GRB Afterglow



Neil Gehrels
Swift
Observatory



Fermi Gamma-Ray Space
Telescope



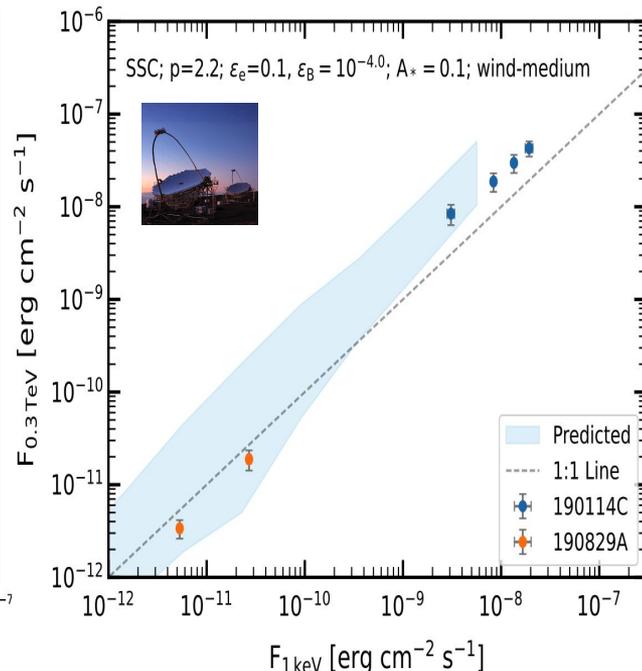
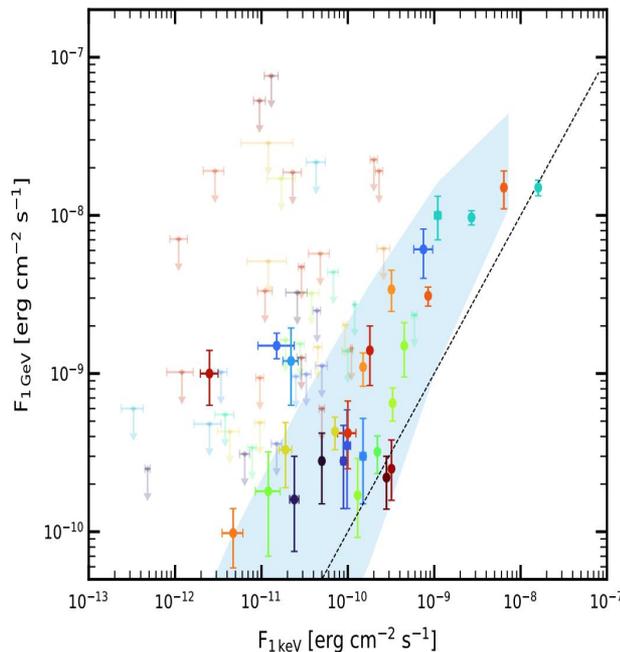
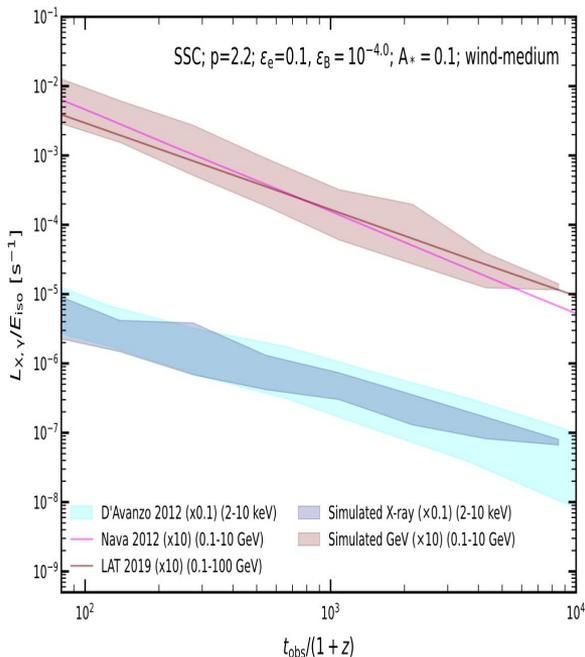
Afterglow
Radiation processes ? Microphysical parameters ?
Circumburst medium ? VHE prediction !

2nd UNDARK School: The multi-messenger non-thermal universe

Results and Prediction



Synchrotron Self-Compton in wind-medium with $\eta=0.1$, $p=2.2$, $\epsilon_e \sim 0.1$, $\epsilon_B \sim 10^{-4}$



Study can play important role in modelling VHE emission and designing observation strategy for detecting VHE photons for GRBs with current and future Cherenkov Telescope.

Thank you for your attention!!