Contribution ID: 6 Type: Invited

## Fermi-GBM in the Multimessenger Era

Monday, 12 April 2021 16:25 (25 minutes)

The Fermi Gamma-ray Burst Monitor (GBM) is an all-sky monitoring instrument designed to detect the prompt emission from a gamma-ray burst (GRB) and provide near-real time locations for follow-up observations. Over the past 11 years of operation, the GBM has detected over 240 gamma-ray bursts per year and provided timely community notices with localization to few-degree accuracy such as GRB 170817A. Its wide field of view and high uptime is ideal for observing the gamma-ray sky simultaneously with gravitational wave observatories. This collaborative effort proved fruitful when GRB 170817A was identified as the first short GRB unambiguously associated with binary neutron star merger event GW170817. This multi-messenger discovery and the intense follow-up observations by many instruments enabled new measurements of the speed of gravity, the Hubble constant, and expanded our understanding of relativistic jets. In this talk, I will discuss the ongoing efforts searching for more GRBs coincident with gravitational wave source candidates in addition to the onboard triggering.

Primary author: HUI, Michelle

Presenter: HUI, Michelle

Session Classification: Gravitational Waves and VHE Emission from GRBs

Track Classification: Gamma-ray Bursts