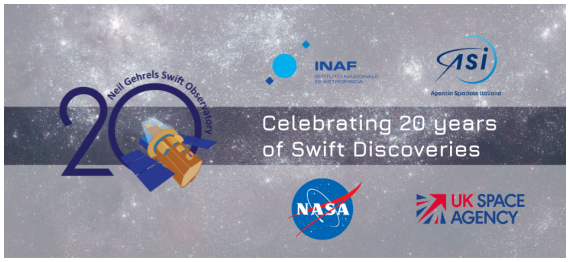

Contribution ID: **106** Type: **Contributed talk**

Swift and the Future of TDAMM Astronomy

Wednesday 26 March 2025 12:00 (15 minutes)

The Neil Gehrels Swift Observatory was designed to catch Gamma-Ray Bursts on the fly. However, with it's combination of rapid response capabilities, fast slewing and multi-wavelength instrumentation, it will likely be remembered for being the Epochal mission for the burgeoning field of Time Domain and Multi-Messenger Astrophysics (TDAMM). In this talk I will, with the aid of science results, demonstrate the evolution of Swift's capabilities that have allowed it to be more responsive to TDAMM priorities than ever. This has been enabled by a unique operations set-up that co-locates the flight operations and science operations teams, and a constantly innovating team that never believed that Swift's operations software was finished. I highlight several recent breakthroughs, including the observation of an FRB by XRT/UVOT at T0+1.9 mins, triggered by CHIME. I also discuss future capabilities that are coming to Swift in 2025. Finally, I talk about how future missions can leverage the heritage that Swift is building every day, to enable the next generation of rapid response TDAMM missions.

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Session Classification: The next decade of GRB science (challenges & missions)