

# SciNeGHE 2016 High-energy gamma-ray experiments at the dawn of gravitational wave astronomy



Contribution ID: 26

Type: **Talk**

## Multimessenger astronomy with Swift: results and prospects.

*Tuesday, 18 October 2016 12:05 (25 minutes)*

With the recent discoveries of astrophysical neutrinos by IceCube, and Gravitational Waves by Advanced LIGO, we live on the cusp of a new era of astronomical research. Combining these messengers with EM data is vital to maximise the scientific gain, but is challenging. The large position uncertainties, particularly from Gravitational Wave detections, make follow-up difficult, and the chances of finding ‘contaminating’ transients unrelated to the trigger event non-negligible. In this review, I summarise the results obtained to date by X-ray follow up of neutrino and Gravitational Wave events with the Swift satellite. I also discuss the prospects for the future, particularly optimisations that can be made by EM team to take advantage of the extra information the LIGO team will be providing in their “O2” observing run.

**Primary author:** Dr EVANS, Philip (University of Leicester)

**Presenter:** Dr EVANS, Philip (University of Leicester)

**Session Classification:** Session Ia: High-Energy experiments: reports and connections with Gravitational Waves

**Track Classification:** High-energy experiments: results and connections with Gravitational Waves