Selected Peer-Reviewed Publications

2020 M. M. Kasliwal et al., *Kilonova Luminosity Function Constraints based on Zwicky Transient Facility searches for 13 Neutron Star Mergers* (accepted)
Developed one of three analysis pipelines used for realtime data analysis in GW follow-up. Lead or contributed to many of the individual GW follow-up campaigns, performed in real-time. Contributed to the post-search data analysis, including estimates of coverage and the statistical interpretation of non-detections.

R. Stein et al., *A high-energy neutrino coincident with a tidal disruption event* (accepted)
Developed the neutrino follow-up program, led many of the neutrino campaigns. Created the program analysis pipeline, led additional post-search follow-up. Identified the Tidal Disruption Event AT2019dsg as a likely neutrino source, led the multi-wavelength modelling, statistical analysis and neutrino data analysis.

V. Paliya et al., *Multi-Frequency Observations of the Candidate Neutrino Emitting Blazar BZB J0955+3551* 2020, ApJ, 902, 29
Performed the statistical analysis of chance coincidence, led neutrino data analysis.

A. Franckowiak et al., *Patterns in the multi-wavelength behavior of candidate neutrino blazars* 2020, ApJ, 893, 162
Contributed to the discussion of statistical analysis and interpretation.

S. van Velzen et al., *Seventeen Tidal Disruption Events from the First Half of ZTF Survey Observations: Entering a New Era of Population Studies* (accepted)
Technical implementation of filtering and analysis pipeline, code development

Selected Proceedings and Publications in Prep.

2020 T. Ahumada et al., *Ab Whiskey: Identification of the Afterglow of the Short-Duration Gamma-Ray Burst GRB 200826A with the Zwicky Transient Facility*, (in prep.)
Created analysis pipeline. Participated in all individual GRB follow-up campaigns, performed real-time data analysis to identify candidate afterglows.

S. Reusch et al., *Observations of bright nuclear transient AT2019fdr coincident with high-energy neutrino IceCube-200530A*, (in prep.)
My analysis pipeline was used for real-time data analysis, participated in all neutrino follow-up campaigns. Led the both statistical and neutrino data analysis of this work, and contributed radio data as PI of a successful VLA DDT proposal.

2019 R. Stein for the IceCube Collaboration, *Search for Neutrinos from Populations of Optical Transients*, PoS(ICRC2019)1016
Developed likelihood analysis code, used by the IceCube collaboration for neutrino astronomy searches. Used this code to performed TDE-neutrino correlation study. Compiled a catalogue of TDEs based on published examples in the literature. Developed code to perform additional cosmology calculations for deriving the diffuse flux associated with a neutrino source population, and used this to set limits on the contribution of TDEs to the neutrino flux.