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Long-duration gamma-ray bursts from compact object mergers

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The duration distribution of gamma-ray bursts is bimodal, and the general consensus has been that the two groups stem from separate progenitors: binary compact object mergers and supernovae for short and long GRBs, respectively. A number of events discovered in the recent past has however proven this distinction to be imperfect. Kilonovae, the smoking-guns of mergers, were detected following the long, bright GRB 211211A and 230307A. Another long GRB stemming from a merger was identified via its host galaxy properties (the first case where dynamical formation of the binary could be ascertained). I will review this newly identified, rapidly expanding population of nearby cosmic explosions.

Primary author: MALESANI, Daniele (IMAPP / Radboud University)

Presenter: MALESANI, Daniele (IMAPP / Radboud University)

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