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Shedding Light on Gravitational Waves

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On 2017 August 17, light was observed from the first neutron star merger detected by Advanced LIGO/Virgo, ushering in a new era of combining electromagnetic and gravitational waves to study the Universe. I will describe the efforts by astronomers to discover the optical counterpart, and what was learned from the unique data taken during the first night following the merger. I will then describe the followup work on one of the best studied astronomical transients ever. Finally, I will discuss the remaining mysteries that surround this event, including the origin of the bright blue light seen at early times.