## GWADW2021 Gravitational Wave Advanced Detector Workshop



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Type: talk

## **Binary neutron star mergers**

Monday, 17 May 2021 06:00 (30 minutes)

What is the nature of neutron stars? Where are r-process elements formed in the Universe? Multimessenger observations of neutron star mergers might provide us with the key to answer these and other important open questions in theoretical astrophysics. In this talk, I will review our current theoretical understanding of how neutron star mergers proceed and of how the dynamics is imprinted in their multimessenger emissions. I will present recent simulation results and discuss their implications. Finally, I will talk about future challenges and prospective for this field.

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Track Classification: Physics: Multimessenger perspective