



Contribution ID: 48

Type: **Invited talk**

Equation-of-state constraints from helium in kilonovae

Wednesday, January 29, 2025 10:10 AM (40 minutes)

Neutron-star mergers are excellent laboratories for studying the properties of high-density matter. I will report our recent study modeling the imprint of helium absorption features in kilonova spectra, which revealed that the kilonova accompanying GW170817 likely did not harbor significant amounts of helium. I will discuss the implications of this finding for the lifetime of the neutron-star remnant and for the equation-of-state related properties of cold neutron stars.

Primary author: JUST, Oliver (GSI Darmstadt)

Presenter: JUST, Oliver (GSI Darmstadt)

Session Classification: Oral Presentation