

Plenary Talk PV IV Tue 9:00 H-Aula/HS I/HS X
The Making of High-Precision Gravitational Waves —
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Solving the two-body problem in General Relativity has been crucial in
observing gravitational waves from binary systems composed of black

holes and neutron stars, and inferring their astrophysical and cosmo-
logical properties.

After reviewing the theoretical groundwork that has enabled these
major scientific discoveries, I will discuss how these new astronomical
messengers can unveil the properties of the most extreme astrophysical
objects in the universe, and inform us about the nature of gravity in
the highly dynamical space-time regime.