Abstract Submitted
for the APR16 Meeting of
The American Physical Society

On the measurement of spinning compact binaries with the gravitational-wave observatory Advanced LIGO. VIVIEN RAYMOND, Max Planck Institute for Gravitational Physics, LIGO VIRGO COLLABORATION COLLABORATION — After years of developments, the Advanced LIGO observatories have completed their first run. This 5-month long record of the gravitational-wave universe is the most sensitive to date, an improvement of several times over the initial instruments. Coalescences of spinning neutron stars and/or black holes are expected to be a main source of gravitational-wave signals, and the extraction of their parameters is especially promising. Spin measurements in particular hold great potential in astrophysical formation scenarios, strong field dynamics, and other fields. In this presentation we report on the spin parameter estimation methods and their applications in the advanced gravitational-wave detector era.

Vivien Raymond
Max Planck Institute for Gravitational Physics

Date submitted: 08 Jan 2016 Electronic form version 1.4