

**A PHYSICS DEPARTMENT VIRTUAL
PUBLIC LECTURE
AT FLORIDA STATE UNIVERSITY**

**The Beginning of Gravitational Wave Astronomy
*Current State and Some About the Future***

Prof. Rainer Weiss
Massachusetts Institute of Technology
2017 Nobel Laureate

Monday, October 19, 2020 at 7:30 pm

For more information, see <https://physics.fsu.edu/gravitational-waves-public-lecture-2020>

This talk will introduce what gravitational waves are and how they are detected. The observation of the waves from binary black hole collisions in 2015 opened the field, followed in 2017 by the observation of the waves from a binary neutron star collision, which was also observed by many astronomers with different instruments. By now, over 30 compact binary systems have been cataloged. The detectors are being improved to allow searches for more distant sources, as well as improved searches for different types of gravitational wave sources. The development of instruments to bring gravitational wave astronomy into cosmology will be discussed.