

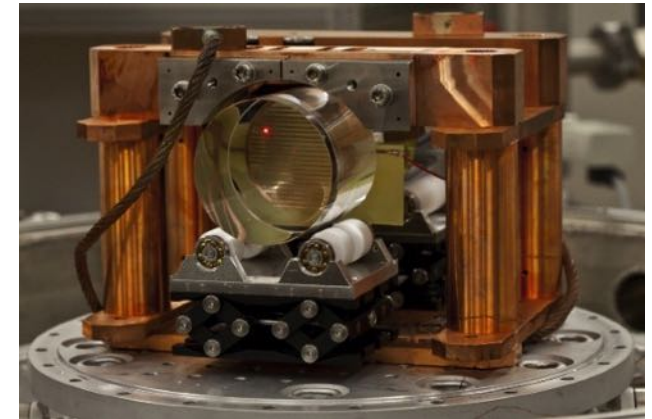
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The Physics of Gravitational Wave Detection



The direct detection of gravitational waves has been one of the most challenging enterprises of mankind. With the direct observation in 2015 a new window to the universe was opened starting multimessenger astronomy. Several further detections have shown the potential of gravitational wave astronomy dealing with black hole or neutron star physics.

This talk will briefly review the experimental history of gravitational wave science and focus on the most important experimental facts that had to be solved for a successful use of the instruments: lowering seismic and thermal noise as well dealing with the quantum nature of photons. A quick look into the future of a possible gravitational wave observatory will be given and current challenges will be discussed.

Nach dem Kolloquium gibt es im Seminarraum 1 (2. Stock, Zi. 2.005) die Gelegenheit, bei Kaffee und Kuchen mit dem Vortragenden zu diskutieren.