

Precession of Mercury's perihelion

Gravitational wave astronomy

Standard

Theory

Experiment/ observations Newtonian Gravity

Celestial mechanics develop to extent that **detailed** orbital modeling could be made

Accurate (and time accumulating)
data for unexpected
additional precession rate.

General Relativity

Accurate GW source/propagation modeling

Large number of events and/or highly sensitive GW detectors. Something unexpected in the future?