

Detection of Gravitational Waves

The background of the slide is a dark, deep purple space filled with numerous small, distant stars. In the center, two bright, glowing spheres are shown in the process of merging. The sphere on the left is a vibrant purple, while the one on the right is a bright, almost white-yellow. Concentric, glowing ripples emanate from the point where the two spheres are closest, representing the propagation of gravitational waves through the fabric of spacetime. The ripples are depicted as concentric, slightly irregular rings of light, creating a sense of depth and movement.



Equivalence Principle

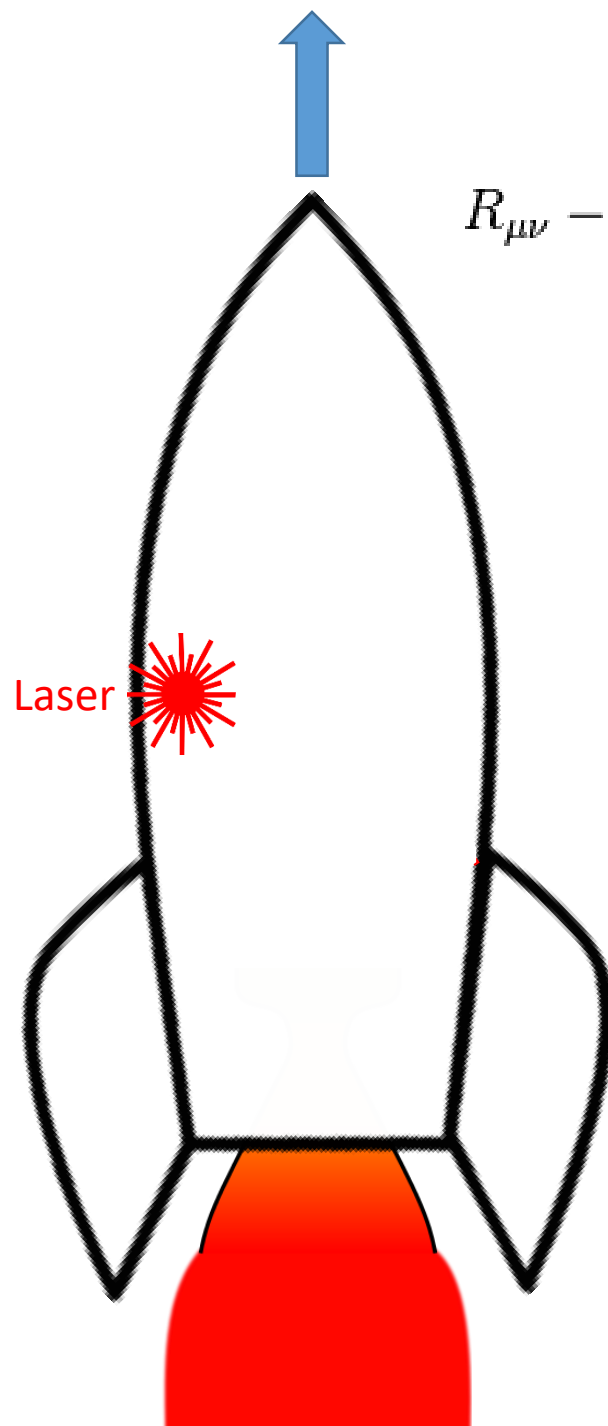


Equivalence Principle

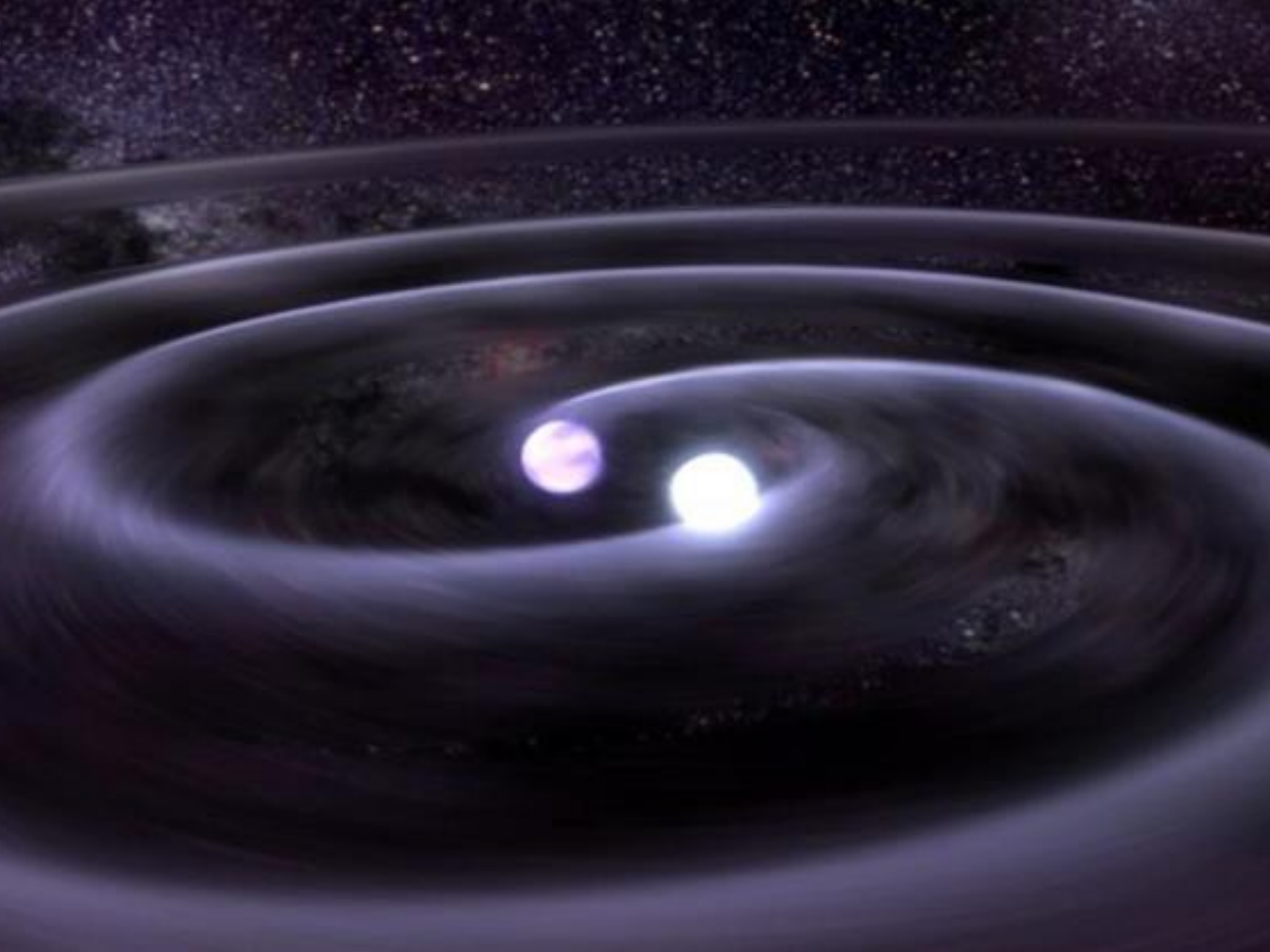


Equivalence Principle

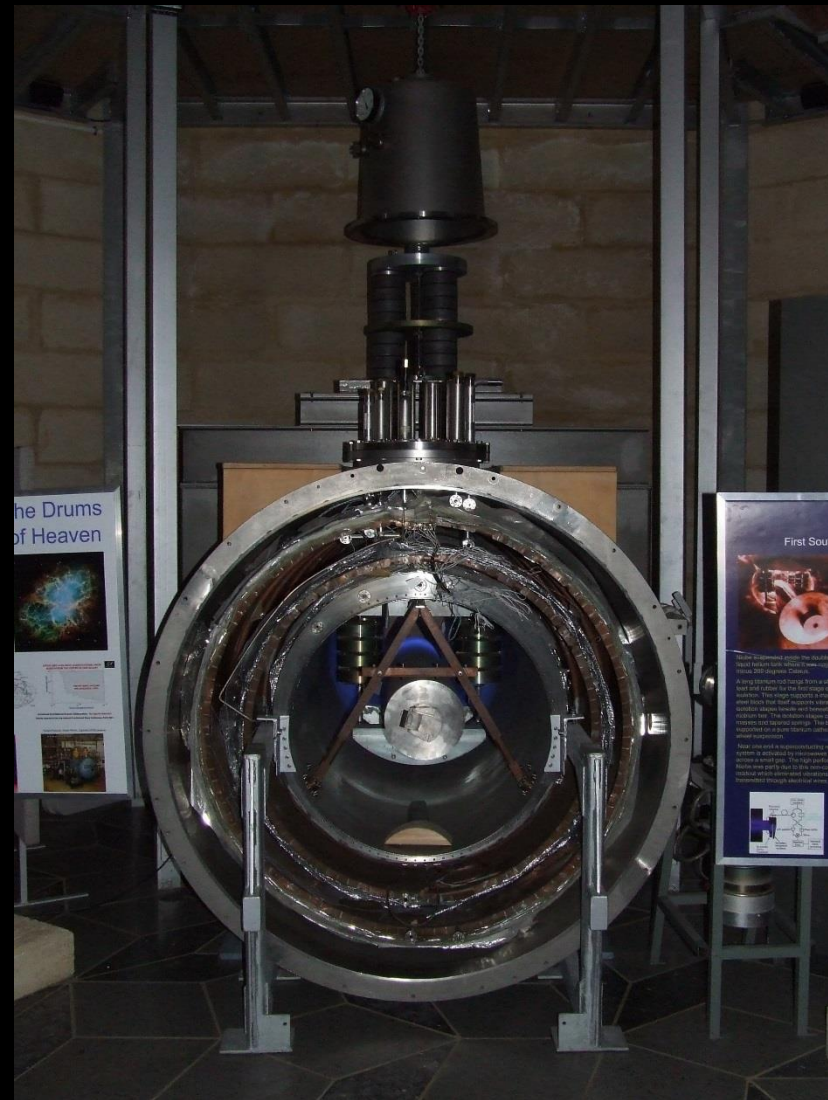




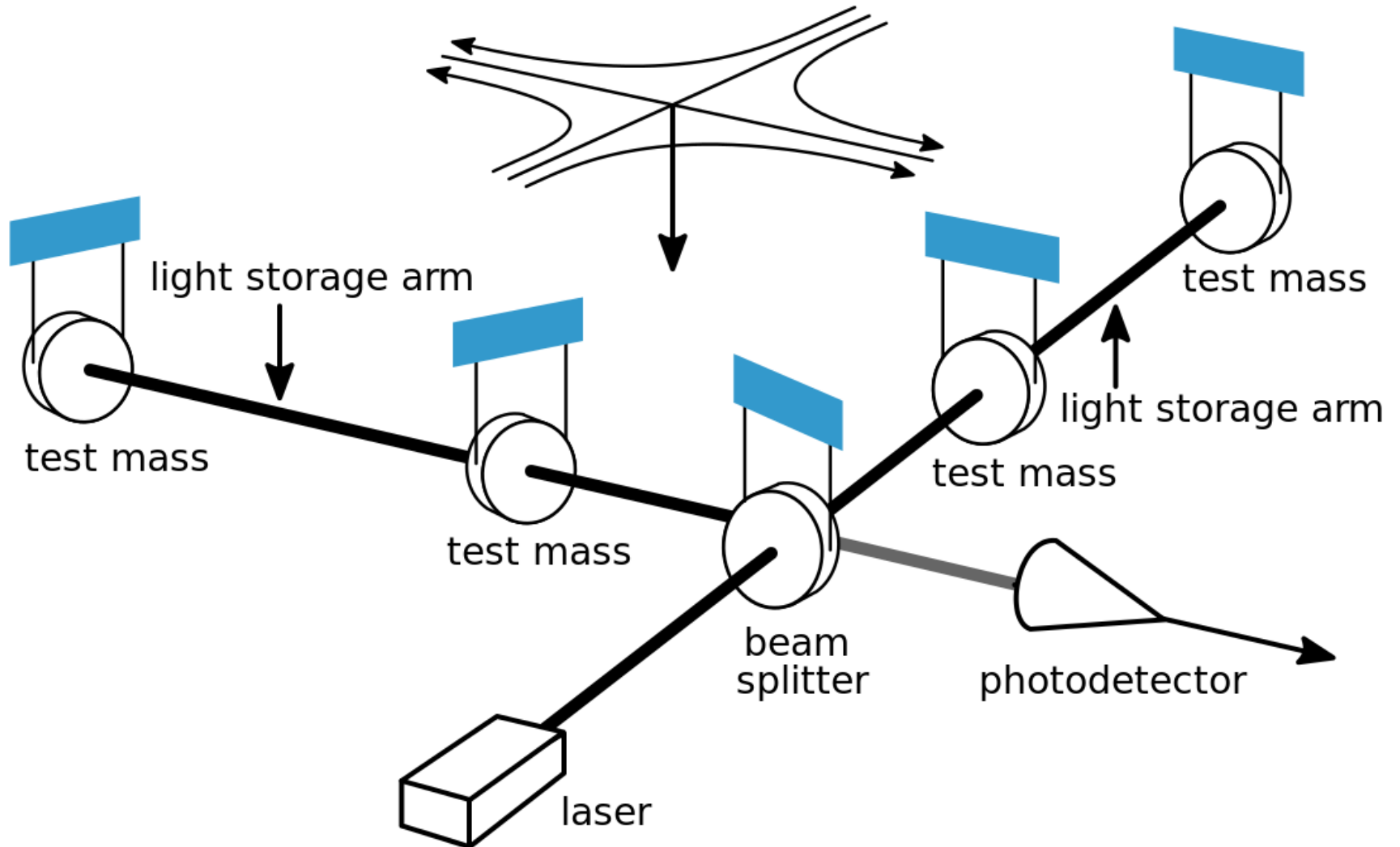
$$R_{\mu\nu} - \frac{1}{2}R g_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c^4}T_{\mu\nu}$$



Detectors



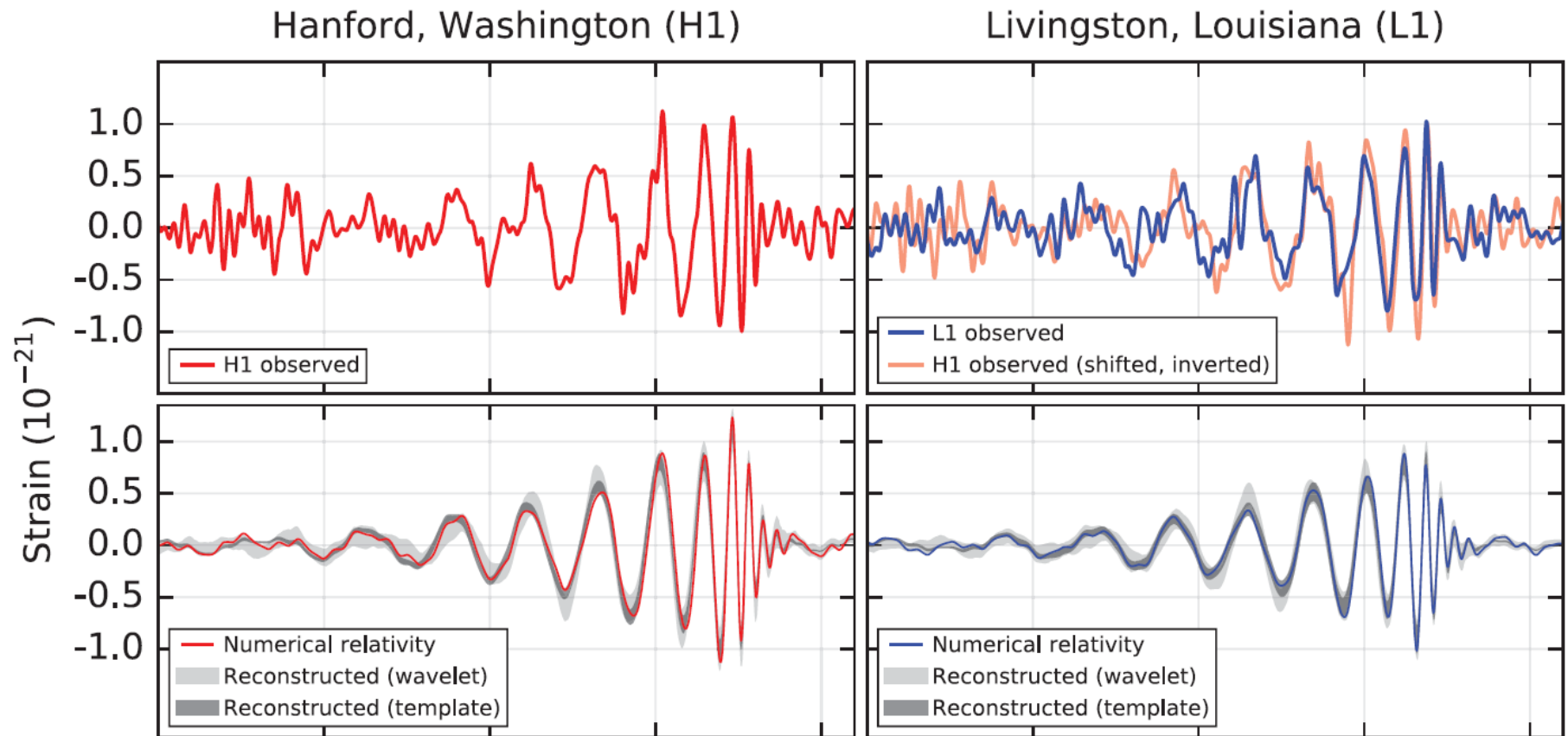
Detectors



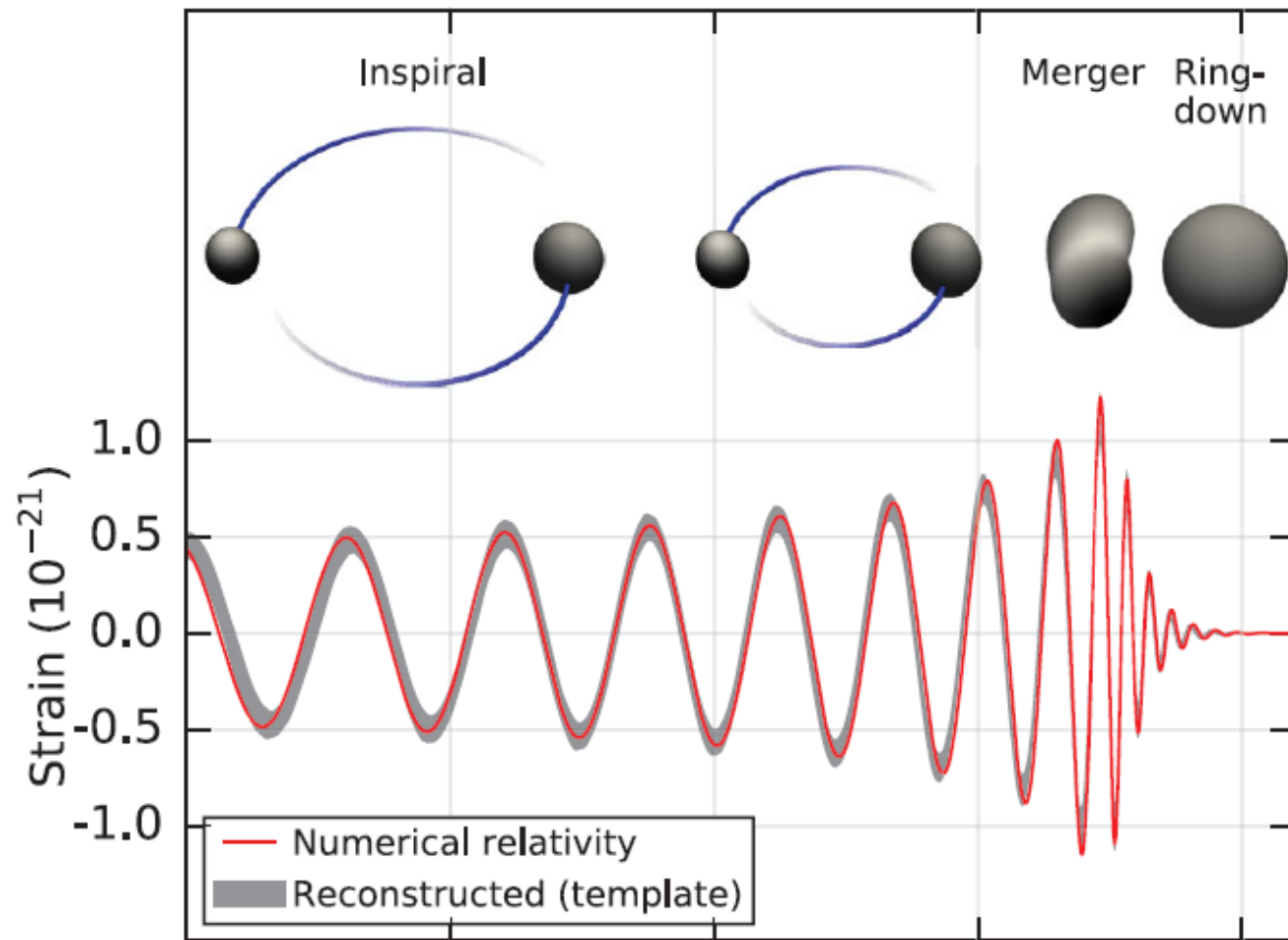
Detectors



Detection!



Detection!



Detection Banana

