

FYI: Application: Gravity Wave Detection

LIGO:

Laser

Interferometric

Gravitational wave

Observatory



-World's largest interferometers: 4-km

-2 in Hanford, WA; 1 in Livingston, LO

- >500 scientists

-Achieved sensitivity $\Delta L/L \sim 10^{-23} \rightarrow \Delta L \sim 10^{-20}$ m

-Six data runs completed.

-“Advanced LIGO” should improve sensitivity by another 10x.