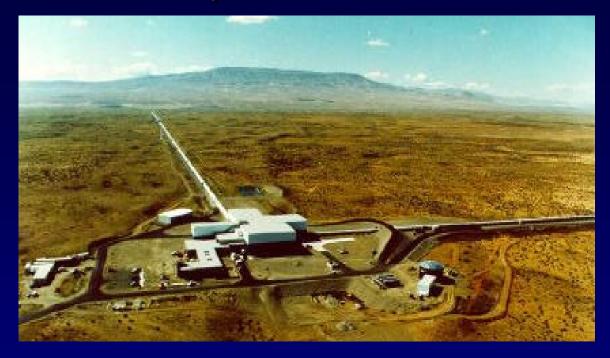
## FYI: Application: Gravity Wave Detection

## LIGO:

Laser
Interferometric
Gravitational wave

<u>O</u>bservatory



- -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.