LIGO
Gravitational Waves

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Radiation of Gravitational Waves from binary inspiral system

direct detection
Simultaneously detect signal (within msec)
- detection confidence
- locate the sources
- decompose polarization of gravitational waves
phase noise

splitting the fringe

- Spectral sensitivity of MIT phase noise interferometer
- above 500 Hz shot noise limited near LIGO I goal
- additional features are from 60 Hz powerline harmonics, wire resonances (600 Hz), mount resonances, etc