Future Directions in Gravitational Physics

Gabriela’s direction:

Physics of Gravitational waves

• **Detectors’ technology:**
  ready, and improving

• **Network of detectors:**
  LIGO (3) + VIRGO + GEO+ TAMA + bars +…

• **Detection strategies:**
  waveforms, data analysis, data quality

• **Detection (!):**
  Technology + funding: Advanced detectors, LISA
  Physics + Astrophysics!
What 10 years can do


Launched 2001, 1st results published in 2003: 45 times more sensitive, 33 times better resolution.
Next 10 years in GW detection

Cutler, Thorne 2002

10^{-4}-0.3/yr

1-1,000/yr

2004-2007

2010-?

2015?
Are we there yet?