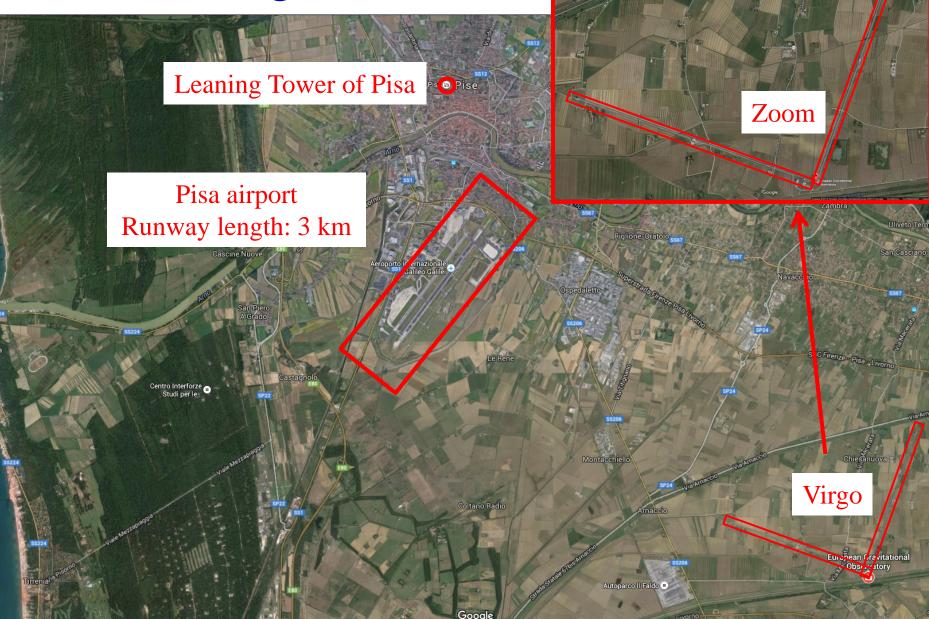
#### The Virgo site



# The Virgo Collaboration

• 6 European countries



- 21 laboratories
- About 300 members (LIGO : 750)



## The Virgo Collaboration

- 6 European countries
- 21 laboratories
- About 300 members (LIGO: 750)
- Virgo was built by 11 CNRS (France) and INFN (Italy) laboratories
  - Budget: ~150 M€
  - Groups from the Netherlands, Poland, Hungary and Spain joined later the project
- Advanced Virgo funding: ~20 M€
  - Plus in-kind contribution from NIKHEF
- The EGO (European Gravitational Observatory) consortium is managing the Virgo site in Cascina. It provides the infrastructures and ressources to ensure the detector construction and operation

**APC** Paris **ARTEMIS** Nice EGO Cascina **INFN Firenze-Urbino INFN Genova INFN Napoli INFN Perugia INFN Pisa INFN Roma La Sapienza INFN Roma Tor Vergata INFN Padova INFN TIFPA** LAL Orsay – ESPCI Paris **LAPP Annecy LKB** Paris LMA Lyon **NIKHEF Amsterdam POLGRAW** (Poland) **RADBOUD** Uni. Nijmegen **RMKI Budapest** Valence University

#### **VIRGO TIMELINES**

- 1985: Alain Brillet (CNRS, France) and Adalberto Giazotto (INFN, Italy) start collaborating
- 1989: First Virgo proposal submitted
- 1994: Project approved by CNRS and INFN
- 1996: Site construction starts in Cascina, near Pisa (Tuscany)



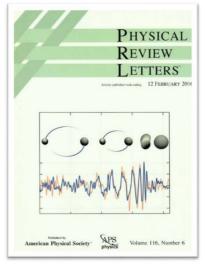
Aerial view of the site construction near Cascina (Italy)

- May 2007: Creation of the LIGO-Virgo Collaboration, signature of an agreement on the full sharing of data, joint data analysis and common publications
- 2007-2011: Data-taking periods for the initial Virgo detector
- 2011-2016: Pluriannual upgrade program leading to the second generation detector: Advanced Virgo
- 2015: First detection of gravitational waves by LIGO and Virgo
- 2016-2017: Advanced Virgo commissioning
- August 2017: Advanced Virgo joint data-taking with LIGO
- September 27, 2017: announcement of the first three detectors observation of gravitational waves



Left: A. Brillet, right: A.Giazotto

- December 2001: Creation of the European Gravitational Observatory by CNRS and INFN
- 2003: End of site construction and inauguration
- 2006: The Netherlands (Nikhef Institute) join the Virgo Collaboration – followed later by Poland (IMPAN), Hungary (Wigner Institute) and Spain (University of Valencia)



Cover of the Gravitational Waves detection paper published on February 12, 2016



### Virgo from the sky

