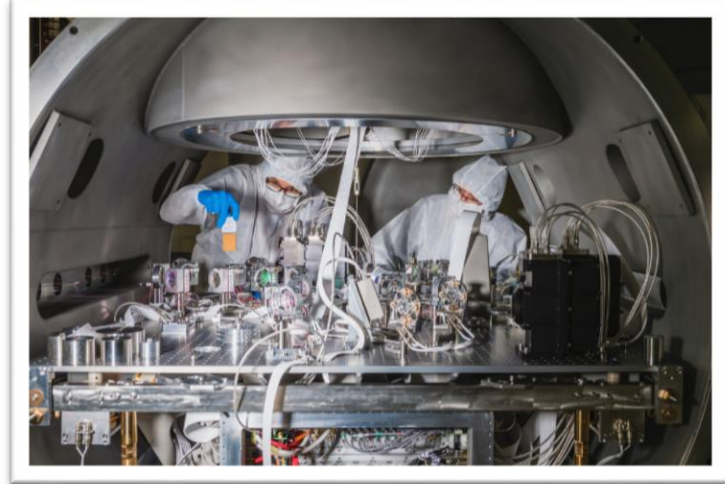


ADVANCED VIRGO TIMELINES

- October 2007: Advanced Virgo initial design completed
- November 2008-May 2009: Project reviewed by an international committee
- December 2009: Advanced Virgo project approved by the funding agencies
- October 2011: Virgo decommissioning starts



*Physicists working on one of the suspended benches
(Photo: © Cyril FRESILLON/Virgo/CNRS Photothèque)*

- April 2012: Advanced Virgo final design
- August 2016: End of the integration phase: Advanced Virgo fully under vacuum
- February 2017: Advanced Virgo dedication ceremony
- August 2017: Virgo joins LIGO for four weeks of data-taking
- September 27, 2017: announcement of the first three detectors observation of gravitational waves

*West arm of the Virgo interferometer
(Photo: © Cyril FRESILLON/Virgo/CNRS Photothèque)*



A close-up of Advanced Virgo over the past 12 months

- 2016 August: End of integration: Advanced Virgo fully under vacuum
- November: Full detector available for commissioning
- December: Control of the power-recycled interferometer, Michelson degree of freedom controlled at half fringe
- 2017 February: Advanced Virgo dedication ceremony, full interferometer controlled for 15 minutes
- March: One hour stable control of the full detector
- April: Control of the final configuration
- May-July: Control performance and sensitivity improvements, noise hunting
- July: Best sensitivity achieved by the first generation Virgo detector exceeded
- August: Virgo joins LIGO for four weeks of data-taking
- **Fall 2017: Publication of the first gravitational-wave detection including Virgo data**

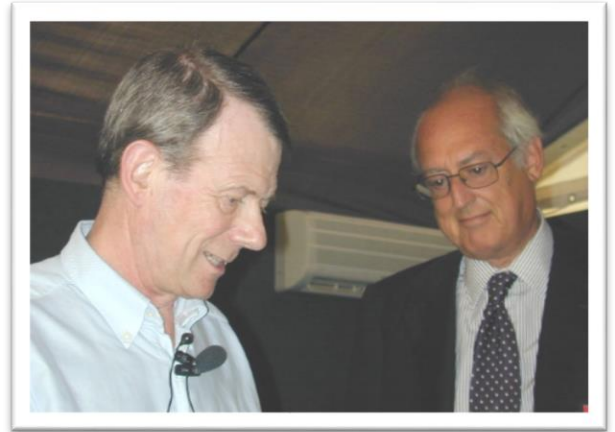


Mirror of Advanced Virgo
(Photo: @enrico sacchetti www.es-photography.com)



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)



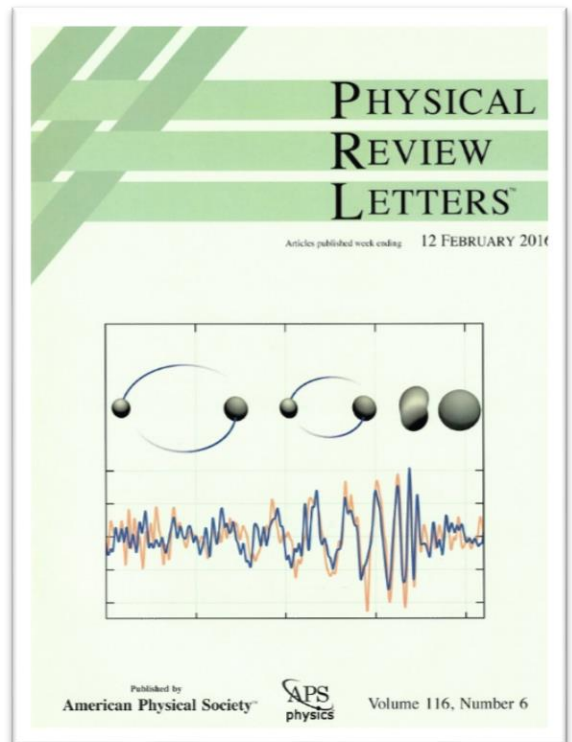
Left: A. Brillet, right: A. Giazotto

- 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)



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



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

