

Artemis

- Artemis is one of the 3 laboratories hosted at the Observatoire de la Côte d'Azur in Nice.
- Created in 1999 by Alain Brillet, one of the founder father of the Virgo project.
- Main science topic: gravitational waves from theory to detectors passing through data analysis and astrophysics.
- ~50 members, including permanents, PhD and postdocs.



Teams and projects @ Artemis

- GW projects:
 - Virgo, LISA and Einstein Telescope
- Laser & cavities
- Metrology
- MIGA (atomic GW detector)
- GW data analysis & interpretation
- Alternative theories to general relativity



Focusing on gravitational wave physics

Virgo group

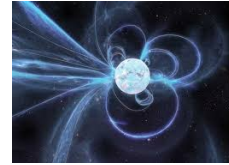
- High power stabilized laser



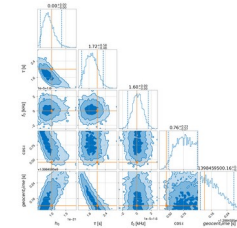
- Scattered light measurement



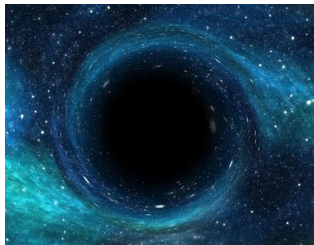
- Search for new transient sources



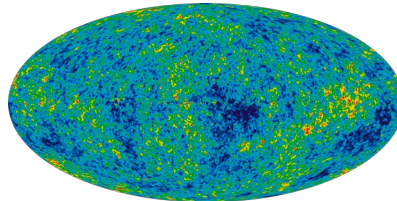
- Burst source parameter estimation



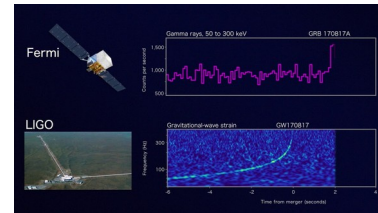
- Primordial BH inference



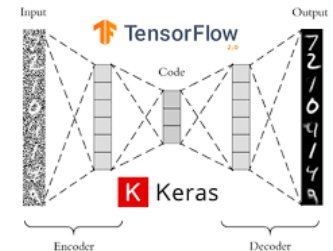
- Background GW search



- Multi-messenger analysis

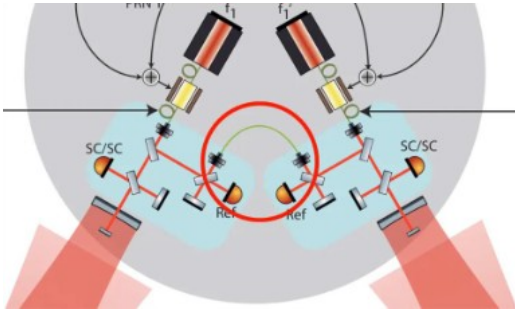


- Machine learning for GW detection

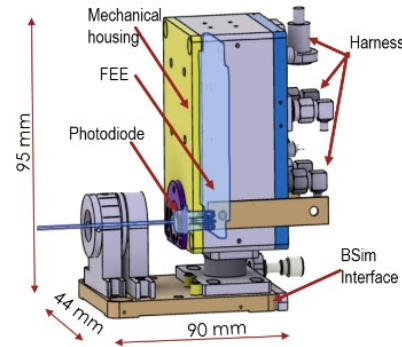


LISA group (involving Lagrange laboratory)

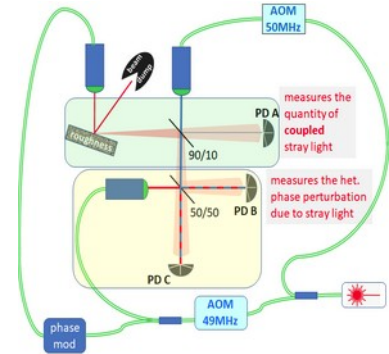
- Stray light studies



- Photodiodes radiation test

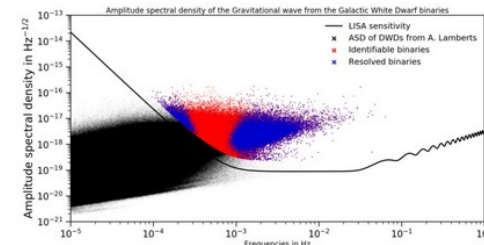


- Prototype SL-OGSE



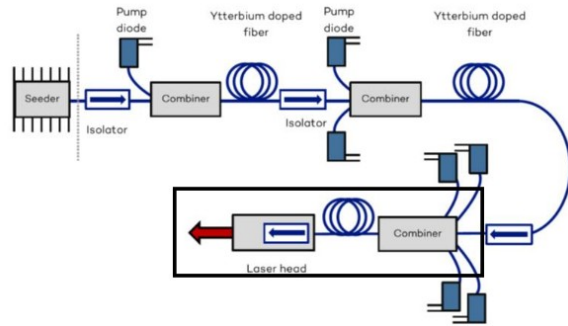
- LISA Distributed Data Processing Center: catalogue

- Population studies

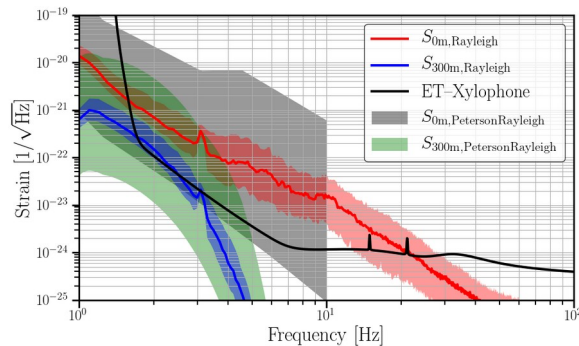


Einstein Telescope group

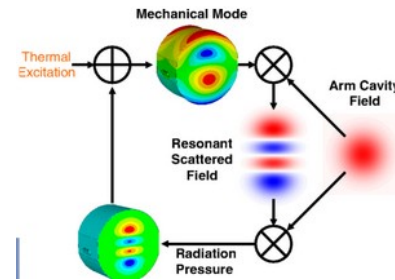
- High power Laser



- Correlated noise studies



- Optomechanics



- Core collapse supernova parameter inference

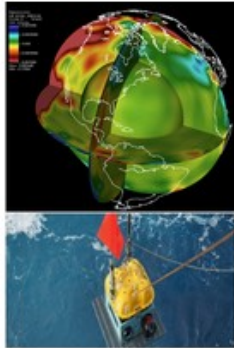


Artemis @ OCA

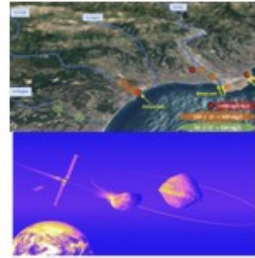
- Permanent members:
 - MA Bizouard, N Christensen, W Chaibi, F Cleva, JP Coulon, N Dimarq, N Dinu-Jaeger, F Kefelian, N Korsokova, H Heitmann, A Lamberts, M Lintz, M Merzougui, O Minazzoli, M Nardello, M Pichot, E Polini, M Trad Nery, Dylan Sabulsky, M Turconi.
- Postdoc
 - P Colcombet, A Rousseau-Tissot, J Suresh
- PhD
 - M Belloti, T Chehab, I Cuceu, V Munoz, A Perogo, C Rondeel, S Sousa
- Master
 - A Cheneti, A Crepinge, E Frigout, A Villares, A Zacharia

OCA environnement

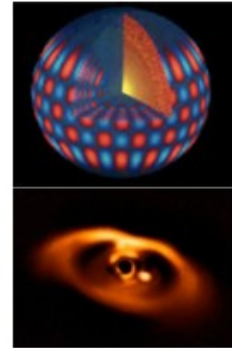
**Risques
naturels
et anthropiques**



**Dynamique
du système Terre**



**Etoiles planètes
exoplanètes**



**Galaxies
cosmologie**



**Ondes
gravitationnelles**



**Planètes
terrestres**

**Ondes gravitationnelles
multimessagers**

Instrumentation-calcul-data

Services nationaux d'observation