

Two-year Postdoc on Gravitational Waves (Virgo Project) at the European Gravitational Observatory

for the development of compensation strategies to reduce interferometer aberrations, of locking and of control strategies for Virgo+ .

Assignment

The fellowship holder will participate to the commissioning of the Virgo+ interferometer. The work will consist in characterizing the thermal aberrations of the interferometer, the implementation of aberrations reduction strategies and locking strategies for Virgo+. In the study of thermal effects, particular attention will be devoted to the coupling of the input thermal aberrations with interferometer aberrations, also with the use of simulations codes.

The work includes also the operation of the Thermal Compensation System, the definition of a figure of merit, the use of different beam input powers, with the aim of operating the interferometer at full power (25 Watts).

Other important activities will concern the suspension control. Part of the work will be dedicated to the tuning of present control loops and to the design of control strategies for Virgo+ equipped with Monolithic Suspensions.

The fellow will work within the commissioning team. He/she will also participate in the preparation of the data taking periods and in the noise analysis.

Requirements

PhD in Physics or in related field. In particular a PhD thesis in fields related to the above mentioned subjects would be a title of merit.

Background requested in Experimental Physics, Optics.

Availability to work in a team will be appreciated.

Fluency in English is crucial.

To apply for this position please use the EGO Application Form available at:

http://www.ego-gw.it/public/organization/jobs/Employment_App_Form.doc and send it to jobs@ego-gw.it quoting the reference FL-CM-08.