



La Palma, 15th January 2016.

## **LaserComb Scientist**

La Palma, Canary Islands, SPAIN – Cambridge, MA, USA

Frequency comb technology is well known but its mode locked laser solution is quite recent. Its application in high precision spectroscopy for astronomy and exoplanet search is developing in TNG-HARPS-N system located in the Roque de Los Muchachos Astrophysical Observatory, La Palma, Canary Islands, SPAIN (<http://www.tng.iac.es/news/2013/02/08/lasercomb/>).

Fundación Galileo Galilei – INAF, Fundación Canaria opens the call for a post-doc position of lasercomb scientist.

### **Main Duties and Responsibilities**

As part of the operations team, the successful candidate will:

- Support and advise the operation teams of LaserComb instruments currently on the mountain on (1) improving and monitoring their operations efficiency, and (2) maintaining/improving their optimal scientific performances, including the quality of their pipeline-reduced data.
- Work with the instrumentation development teams based at Cambridge, USA and La Palma, Canary Islands, SPAIN on (1) developing reliable operation of the LaserComb, and (2) implementing automated operation and reliable diagnostics of the LaserComb.
- Write a User Manual of the LaserComb system located in the Telescopio Nazionale Galileo.

The successful candidate can also lead an instrument operations team sited in FGG-INAF at La Palma, Canary Islands, SPAIN.

# **Fundación Galileo Galilei – INAF, Fundación Canaria Telescopio Nazionale Galileo**

## **Qualifications**

We require Ph.D. in Physics, Engineering or equivalent. Candidates in the final Ph.D. dissertation phase (last year) will be also considered.

Candidates will be evaluated on the basis of documented experiences and competences.

- experience with lasers and opto-electronics with special expertise with femtosecond lasers and Laser Comb technology.
- experience operating and optimizing the performance of frequency combs.
- experience in automation of opto-mechanics will be of value for the successful candidate.
- familiarity with laser technology
- capabilities in aligning and starting high repetition rate frequency combs
- capabilities in aligning opto-mechanical systems
- competency in software development of both control systems for the laser comb system and data analysis.

## **Language Skills**

The position requires a working knowledge of English. A working knowledge of Spanish or Italian, or a willingness to learn it, would be advantageous.

## **Duty Station**

La Palma, Canary Islands, SPAIN and Cambridge, MA, USA. Successful candidate shall report to FGG Lasercomb Responsible and to Cambridge Head of Lasercomb Project.

## **Application**

Applicants are invited to apply in English by sending an email to [jobs@tng.iac.es](mailto:jobs@tng.iac.es) including a motivation letter and a CV (with list of publications), please specify in the subject “ASTROCOMB-TNG”.

The selection will be performed by a Selection Committee appointed by the Director of FGG and is composed of 3 members.



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The selection is based on qualifications possibly integrated by an interview. The Selection Committee will start evaluations on 14<sup>th</sup> February 2016. This call will remain open until a successful candidate will be selected and contract signed, or unless the availability of funds will come to an end.

All the stages of the selection procedure (e.g. meetings of the Selection Committee, interviews and so on) can be performed also using electronic devices for the communications.

### Remuneration and Contract

Successful candidate is supposed to start the Contract as soon as possible.

The contract will be issued in conformity of Spanish rules, will include social charges and Spanish Social Security.

The gross annual salary will be **35000€**, (indicatively, Spanish taxation is around 20%, depending on the personal situation), plus health and social security paid by the Fundación Galilei Galilei. We offer a **contract for an initial period of 1 year**, and subject to work evaluation and fund availability a limited extension will be possible. Financial support for scientific trips and stays at other institutions is foreseen.

FGG is an equal opportunity entity and is determined to ensure that no applicant receives less favourable treatment on the grounds of gender, age, disability, religion, belief, sexual orientation, marital status, or race, or is disadvantaged by conditions or requirements which cannot be shown to be justifiable. During the period of obligatory maternity leave the allowance paid by Spanish Social Security is supplemented by FGG up to the total amount of the grant. The period of obligatory maternity leave will not contribute to the duration of the grant foreseen by the contract.