

The Laboratoire des 2 infinis - Toulouse (L2IT) is inviting applications at different career levels to reinforce and expand its gravitational wave group (see below). L2IT is a new institute established in 2019 with the objective to pursue fundamental research with innovative numerical and theoretical approaches. The research of the institute is focused on particle physics, gravitational waves and the nuclear equation of state, and it is supported by a complementary development of data analysis and data science methodologies.

The gravitational wave group at L2IT conducts research on both theoretical and experimental aspects of gravitational wave science, with a distinct focus at exploiting new ideas connecting theory with observations through data analysis and numerical simulations. The group is part of the LISA Consortium and currently counts two permanent scientists, Christelle Buy and Nicola Tamanini (starting from February 2021), both members of the Virgo Collaboration. The present recruitment process is part of the overall strategy of L2IT which aims at fast expanding in the next few years, including further job opportunities expected in gravitational wave research.

## **PhD OPPORTUNITIES**

- One PhD Position in Gravitational Waves

Job description: Applications are invited for a PhD position in gravitational waves at L2IT, starting in Fall 2021. The successful candidate must have completed a Master degree in physics or equivalent by the starting date.

Application instructions: The official application process will follow the standard procedure of the École Doctorale. Potential candidates are invited to discuss their application with members of L2IT and send them the following documents:

- 1) Curriculum vitae
- 2) Personal statement describing research interests and motivation for applying (1 page maximum)
- 3) Transcript of all courses with grades

Deadline: Please send the material mentioned above to Nicola Tamanini ([nicola.tamanini@l2it.in2p3.fr](mailto:nicola.tamanini@l2it.in2p3.fr)) before the 1st of February 2021. Applications will be considered until the position is filled.

Contact: Please contact Christelle Buy ([christelle.buy@l2it.in2p3.fr](mailto:christelle.buy@l2it.in2p3.fr)) or Nicola Tamanini ([nicola.tamanini@l2it.in2p3.fr](mailto:nicola.tamanini@l2it.in2p3.fr)) with any questions.

## **POSTDOC OPPORTUNITIES**

- One Postdoc Position in Gravitational Wave Cosmology Starting Spring 2021

Job description: Applications are invited for a postdoc position at the Laboratoire des 2 Infinis - Toulouse (L2IT) to work with Nicola Tamanini on theoretical and observational aspects of the propagation of gravitational waves at cosmological distances, including tests on the nature of dark energy. The successful candidate must have obtained a PhD degree or equivalent before the starting date. Candidates with a maximum of two years of postdoctoral experience are strongly encouraged to apply. The successful candidate is expected to start the job in March 2021, or as soon as possible after that. The position is initially funded for 16 months, until summer 2022.

Application instructions: Interested candidates must send an email with the subject "Postdoc Application Spring" to Nicola Tamanini ([nicola.tamanini@l2it.in2p3.fr](mailto:nicola.tamanini@l2it.in2p3.fr) <mailto:nicola.tamanini@l2it.in2p3.fr>) and arrange for the following documents to be sent at the same email address:

- 1) Curriculum vitae
- 2) List of publications
- 3) Personal statement describing research interests and motivation for applying (2 pages max, refs excluded)
- 4) Two or more letters of recommendation, submitted by the reference writers (email subject "Reference for NAME SURNAME")

Deadline: The review process will start on the 18th of January 2021. Remote interviews will be planned for the end of January or beginning of February 2021. Applications will be considered until the position is filled.

Contact: Please contact Nicola Tamanini ([nicola.tamanini@l2it.in2p3.fr](mailto:nicola.tamanini@l2it.in2p3.fr) <mailto:nicola.tamanini@l2it.in2p3.fr>) with any questions.

- One Postdoc Position in Gravitational Waves Starting Fall 2021

Job description: Applications are invited for a 2-year postdoc position at the Laboratoire des 2 Infinis - Toulouse (L2IT) to work on gravitational wave topics which well integrate with the research interests of the gravitational wave group at L2IT. The successful candidate must have obtained a PhD degree or equivalent before the starting date, and is expected to start the job in September 2021 or as soon as possible after that.

Application instructions: Interested candidates must send an email with the subject "Postdoc Application Fall" to Nicola Tamanini ([nicola.tamanini@l2it.in2p3.fr](mailto:nicola.tamanini@l2it.in2p3.fr) <mailto:nicola.tamanini@l2it.in2p3.fr>) and arrange for the following documents to be sent at the same email address:

- 1) Curriculum vitae
- 2) List of publications
- 3) Cover letter (1 page max)
- 3) Research statements describing past achievements and future plans (2 pages max, refs excluded)
- 4) Two or more letters of recommendation, submitted by the reference writers (email

subject "Reference for NAME SURNAME")

Deadline: The review process will start on the 18th of January 2021. Remote interviews will be planned for the end of January or beginning of February 2021. Applications will be considered until the position is filled. Applicants applying also for the postdoc position in gravitational wave cosmology (starting Spring 2021) can submit a single application including all the documents mentioned here; in this case the cover letter must explicitly state that the application is for both positions.

Contact: Please contact Nicola Tamanini ([nicola.tamanini@l2it.in2p3.fr](mailto:nicola.tamanini@l2it.in2p3.fr) <mailto:nicola.tamanini@l2it.in2p3.fr>) or Christelle Buy ([christelle.buy@l2it.in2p3.fr](mailto:christelle.buy@l2it.in2p3.fr) <mailto:christelle.buy@l2it.in2p3.fr>) with any questions.

#### - Further Postdoc Opportunities

The gravitational wave group at L2IT is expecting further postdoc opportunities to possibly become available in the forthcoming months. Interested researchers are invited to contact members of the L2IT for additional information. Expressions of interest from researchers working on any aspects of the LISA mission are particularly encouraged.

Contacts: Please contact Christelle Buy ([christelle.buy@l2it.in2p3.fr](mailto:christelle.buy@l2it.in2p3.fr) <mailto:christelle.buy@l2it.in2p3.fr>) or Nicola Tamanini ([nicola.tamanini@l2it.in2p3.fr](mailto:nicola.tamanini@l2it.in2p3.fr) <mailto:nicola.tamanini@l2it.in2p3.fr>) for further information.