

Ph.D. and Postdoctoral Positions in Gravitational Wave Astrophysics at the Max Planck Institute for Gravitational Physics in Potsdam

The "Astrophysical and Cosmological Relativity" division at the Max Planck Institute for Gravitational Physics ([Albert Einstein Institute](#)) in Potsdam announces the opening of several postdoctoral appointments and Ph.D. positions. The postdoctoral positions will be available at different levels, depending on experience and seniority, and can last for a different number of years.

[The division](#), led by Dr. Alessandra Buonanno, is currently composed of 21 scientists, and one research group leader, Dr. Harald Pfeiffer. The division also hosts several long and short-term visitors.

The "Astrophysical and Cosmological Relativity" division focuses on several aspects of gravitational-wave physics and astrophysics, including (i) theoretical gravitational dynamics and radiation (effective field theory, post-Newtonian theory, gravitational self-force approach, perturbation theory and effective-one-body formalism), (ii) numerical relativity, most notably simulations of binary black holes and binary neutron stars, (iii) interpretation and analysis of data from gravitational-wave detectors on the ground (LIGO and Virgo) and in space (LISA), (iv) astrophysics of compact objects, (v) cosmography with gravitational waves from binary systems, and (vi) tests of strong gravity within General Relativity and alternative gravity theories. Members of the division have the opportunity to join the LIGO Scientific Collaboration through the group's membership, the LISA Consortium, and also participate in building the science case for third generation ground-based detectors (Einstein Telescope and Cosmic Explorer).

The "Astrophysical and Cosmological Relativity" division has two high-performance computer clusters (Minerva and Vulcan) to run numerical-relativity simulations, and to carry out source modelling and data-analysis studies.

The "Astrophysical and Cosmological Relativity" division has ties with the Physics Department at the University of Maryland, the Humboldt University in Berlin, and the University of Potsdam.

For more information, a list of required documentation, and submission links to both postdoctoral and Ph.D. positions, please visit the [job posting webpage](#).

The "Astrophysical and Cosmological Relativity" division also offers Max Planck Fellowships to non-German scientists. Information on those fellowships and explanations on how to apply are summarized on [the website](#).

Candidates are encouraged to apply as soon as possible. The deadline for full consideration for both Ph.D. and postdoctoral positions is, December 15, 2017. The positions are available as early as Spring 2018, but they can also start later, in Fall 2018. Applications will be considered until all positions are filled.

The Max Planck Institute for Gravitational Physics is an equal opportunity employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, or disability.

For further information please contact Dr. Andre Schirotzek: andre.schirotzek@aei.mpg.de