Postdoctoral positions at the Rochester Institute of Technology

The Center for Computational Relativity and Gravitation (CCRG) at the Rochester Institute of Technology (RIT) anticipates filling several postdoctoral positions in the coming year. We are looking for postdoctoral candidates in the following areas: computational astrophysics, astrophysical numerical relativity, gravitational-wave astronomy and gravitational-wave data analysis.

In the area of computational astrophysics and astrophysical numerical relativity we are particularly interested in candidates who are interested in relativistic magneto-hydrodynamics (GRMHD) simulations of accretion disks around supermassive black hole mergers, and jet dynamics. This work will have direct impact on electromagnetic observations of active galactic nuclei, and is part of an ongoing long-term collaborative research effort with Julian Krolik at Johns Hopkins University, Scott Noble at the University of Tulsa, as well as other collaborators.

In the area of gravitational-wave astronomy, we are particularly interested in candidates who are interested in the data analysis challenges involved in the detection of astrophysical gravitational wave sources, including LMXBs and merging compact binaries; in the parameter estimation of binary compact objects, particularly binary black holes; and in the opportunities afforded by multimessenger astrophysics.

The successful postdoctoral candidates will have the opportunity to collaborate on a broad range of research topics in gravitational physics. Our group is involved in several large collaborations, including the LIGO Scientific Collaboration (LSC), The Einstein Toolkit Consortium (http://einsteintoolkit.org), a Petascale computing project with NCSA, the NINJA (Numerical Injection Analysis) project, and the NRAR (numerical relativity-analytical relativity) collaboration.

There are many senior researchers working in a broad range of areas of gravitational physics and astrophysics at the CCRG. This includes Manuela Campanelli (Director), Joshua Faber, Carlos Lousto, Richard O'Shaughnessy, Jason Nordhaus, Yosef Zlochower, John Whelan, and Hans-Peter Bischof (a visualization expert), several postdoctoral fellows and Ph.D. students (see http://ccrg.rit.edu/people for an overview on who is or has been at CCRG). The group also collaborates with many faculty, postdocs and graduate students in the larger astrophysics group (http://www.rit.edu/cos/astrophysics/), the school of Mathematical Sciences (http://www.rit.edu/cos/sms/) and the School of Physics and Astronomy (http://www.rit.edu/cos/physics/).

The positions are for two or three years and renewable depending on satisfactory performance and the availability of funds. CCRG

researchers have access to several computing cluster facilities at national computing centers such as XSEDE and BlueWaters as well as a dedicated 1600-core cluster hosted at the Center.

More information about the CCRG is available at http://ccrg.rit.edu/ And about Rochester at http://en.wikipedia.org/wiki/Rochester,_New_York

Applications should consist of a cover letter, a brief statement of research interests, a curriculum vitae including publication list, and at least three letters of recommendation. All materials should be sent electronically as soon as possible to: ccrg-postdoc[AT]ccrgweb.rit.edu For an overview of all job openings at CCRG please go to: http://ccrg.rit.edu/spotlight/jobs.

Enquiries can be addressed to the center's Director:

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Review of completed applications will begin as soon as available and will continue until a suitable candidate is found. RIT is committed to equal employment opportunity and affirmative action.