

Postdoctoral positions around the world:

A postdoctoral position in theoretical condensed matter physics is available in Georg Schwiete's research group at the University of **Alabama**, Tuscaloosa for January 2018.

Areas of interest include, broadly speaking: transport and non-equilibrium effects in many-body systems and novel quantum materials, including aspects of spintronics.

Experience in quantum many-body techniques will be an asset. The appointment is until August 2019. A PhD is required at the beginning of the appointment. Therefore, candidates in the final stages of completing their PhD are also encouraged to apply. Inquiries about the position should be addressed to gschwiete@ua.edu [2].

In order to apply, please (1) submit a cover letter, a CV (including a publication list and a list of references) and a statement of research interests in pdf-format at this website: <https://facultyjobs.ua.edu> (please look up the "physics postdoc pool" and submit there) (2) also send a copy of the application material mentioned in (1) to gschwiete@ua.edu (3) arrange for at least two letters of reference to be sent separately to the same address: gschwiete@ua.edu

Screening of applications will begin immediately and continue until the position is filled.

UA EEO Statement: The University of Alabama is an Equal Employment/Equal Educational Opportunity Institution. All qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age, genetic information, disability, or protected veteran status, and will not be discriminated against because of their protected status. Applicants to and employees of this institution are protected under Federal law from discrimination on several bases. Follow the link below to find out more.

21.12.17

PhD and postdoc positions in condensed matter theory, Institute for Theoretical Physics of the University of **Amsterdam**;

The deadlines for applications are:

- postdoctoral position: 1 February 2018;

- PhD positions: 31 March 2018

<https://jscaux.org/jobs/>

09.01.18

Postdoctoral Fellowship in Condensed Matter Theory at the Center for Electronic Correlations and Magnetism at the University of **Augsburg**;

This postdoctoral position is to be filled in spring 2018. Applications will be reviewed as they arrive.

Qualified candidates are encouraged to apply for a postdoctoral position in Condensed Matter Theory in the Center for Electronic Correlations and Magnetism at the University of Augsburg. This position will start in Spring 2018 and is part of the Collaborative Research Program "From Electronic Correlations to Functionality". Preference will be given to candidates with research interests in ordering phenomena in correlated electron systems, topological sta-

tes of matter, and spin-orbit coupling physics. Applicants should forward their CV, publication list, and a summary of research interests to

Professor Dr. Arno P. Kampf
Theoretische Physik III
Elektronische Korrelationen und Magnetismus
Institut fuer Physik
Universitaet Augsburg
86135 Augsburg
Germany
E-mail: kampfa@physik.uni-augsburg.de

Applications are expected to be accompanied by at least two recommendation letters.

11.04.18

CONDENSED MATTER POST-DOCTORAL POSITION AT CHINESE AND PORTUGUESE INSTITUTIONS PROMOTED BY

The Beijing Computational Science Research Center (CSRC) <http://www.csrc.ac.cn/>

IN COLLABORATION WITH:

Center of Physics and Engineering of Advanced Materials (CeFEMA)

<http://cefema.tecnico.ulisboa.pt/>

- ONE POSITION AT CSRC, **BEIJING**, CHINA AND CeFEMA, **LISBOA**, PORTUGAL
(PERIOD September 2018- August 2021)

Post-doctoral associate position on Condensed Matter Theory to study dynamics and new phases of quantum systems out of equilibrium, specifically, in the areas of driven systems by quantum quenches, driven open quantum systems, effects of interactions in systems with non-trivial topology, topological phase transitions and topological defects and their dynamics.

Host at CSRC (Beijing):

Rubem Mondaini, <https://www.csrc.ac.cn/en/people/faculty/28.html>

Hosts at CeFEMA (Lisbon):

Pedro D. Sacramento, <http://cefema-gt.tecnico.ulisboa.pt/~pdss/>

Pedro Ribeiro, <http://cefema-gt.tecnico.ulisboa.pt/~ribeiro/>

The positions are opened for a three-year appointment, renewable yearly, to be spent half in China and half in Portugal, to start preferentially in September 2018.

Starting Salary: 1,500 euros (after tax)

Based on performance, the 2nd year increment ranges from 1,550 euros to 1,650 euros, and the 3rd year could come up to 1,800 euros (all after tax). (There will be a strict procedure of evaluation on the performance)

Applicants should be no more than 35 years of age at the time of application and should have obtained their Ph.D. after 2012.

Applications, including a detailed curriculum vitae (indicating date of birth, nationality, family status, dependents), list of publications and at least two letters of recommendation (that should be signed, scanned and sent by the reference of the candidate), should be sent to:

Professor Hai-Qing Lin

E-mail: haiqing0@csrc.ac.cn
Professor Pedro D. Sacramento
E-mail: pdss@cefema.tecnico.ulisboa.pt

Please note -- a signed recommendation letter is mandatory, plain-text e-mail recommendation letters are not accepted. Deadline for receipt of applications: 31 May 2018.

22.01.18

Applications are invited for a research associate investigating Theoretical Condensed Matter Physics/Quantum Optics at the Cavendish Laboratory, University of **Cambridge**.

The successful candidate will join the research group of Dr. Andreas Nunnenkamp, and will investigate inter alia feedback control and reservoir engineering, topological phases of light and sound as well as disorder and synchronization in multimode optomechanics. The role is funded by the H2020 FET proactive grant "Hybrid Optomechanical Technologies". The close collaboration with partner institutions, e.g. HITACHI Cambridge Lab and EPFL, is planned.

The candidate must hold (by the start date) a PhD in theoretical quantum optics, condensed matter theory, or closely related discipline. Strong background in the theory of open and/or many-body quantum systems is highly desirable. Background in optomechanics is desirable, but is not essential. The candidate should have a publication record commensurate with career stage and must be able to demonstrate a capacity for independent research.

The appointment will be on the Research Associate scale at a level determined by skills and experience. Expenses for travel and computing associated with the project will be provided. The position is available immediately, start date negotiable, but no later than 1st Oct 2018.

Limit of tenure: The funds for this post are available for 24 months in the first instance.

To apply for this vacancy, please go to <http://www.jobs.cam.ac.uk/job/16394/> and click on the 'Apply'. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

Please ensure that you upload your Curriculum Vitae (CV) including a list of publications and the contact details of at least two referees and a covering letter in the Upload section of the online application. If you upload any additional documents which have not been requested, we will not be able to consider these as part of your application.

Informal enquiries can be addressed via email to Dr Nunnenkamp (an448@cam.ac.uk).

Please quote reference KA14571 on your application and in any correspondence about this vacancy.

The University values diversity and is committed to equality of opportunity.

The University has a responsibility to ensure that all employees are eligible to live and work in the UK.

10.01.18

Applications open for Perimeter Scholars International, Perimeter Institute, **Canada**;
http://landing.perimeterinstitute.ca/applications-open-for-perimeter-scholars-international?ecid=ACsprvu4E4dJEtMFf6lA8j2JONxgcdl4u-BKLNd-o61yHh_IvXopzT3Rzt6Fbc2RVNxXlhERSuog&utm_campaign=ACAD%20-%20PSI&utm_source=hs_email&utm_medium=email&utm_content=59866185&_hsenc=p2ANqtz-98Z79B87ARS_QaTj00iuXoimYdwNeGijjQ6vd3zNCaKjdGSZcX_Ro40lcX5iksRFRU2Bp1nAv2AZHUe0Hcj2tOfMXCNQ&_hsmi=59867309

03.01.18

A fully funded PhD position in my research group at the University of Kent, at **Canterbury**, UK;
The deadline for initial consideration is 6 February 2018
<https://www.kent.ac.uk/physical-sciences/prospective/pg-research/available-research-projects.html#moller>

14.02.18

Delft University of Technology, 1-2 PhD students to start in summer-autumn 2018;
<http://yuli.weblog.tudelft.nl/2018/02/14/post-doc-opening-phd-openings/>

12.11.17

Université **Grenoble** Alpes;

Postdoctoral position

Applications for a postdoctoral opening in condensed matter theory are requested. Preference will be given to candidates with expertise in the quantum aspects of condensed matter physics and research interests in the general area of superconductivity, mesoscopic physics, electron correlations, and disordered systems. The position is for two years. It is funded through an ANR project on the electro-dynamics of disordered superconductors. Grenoble offers a great research environment with a number of strong theoretical and experimental groups. The postdoctoral work will be guided by Manuel Houzet (<http://inac.cea.fr/Pisp/manuel.houzet/>) and Julia Meyer (<http://inac.cea.fr/Pisp/julia.meyer/>) at IN-AC/PHELIQS, Université Grenoble Alpes and CEA Grenoble. Collaborations with experimentalists and other theorists are expected and will be encouraged. Applicants should send a CV including a publication list and a brief summary of research interests by email to julia.meyer@univ-grenoble-alpes.fr. Selected preprints or reprints may also be included. Electronic submission in a single pdf file is strongly preferred. In addition, each applicant should arrange for two letters of recommendation to be sent. For full consideration please apply before January 15, 2018 – though later applications are possible until the position is filled.

PhD position on "Quantum transport in voltage-biased topological Josephson junctions"

Applications for a PhD position in condensed matter theory are requested. The PhD work will be guided by Manuel Houzet (<http://inac.cea.fr/Pisp/manuel.houzet/>) and Julia Meyer (<http://inac.cea.fr/Pisp/julia.meyer/>) at INAC/PHELIQS, Université Grenoble Alpes and CEA Grenob-

le. It is funded through a joint ANR-NSF program on the transport properties of superconducting hybrid structures. Topological phases of matter have attracted much interest in recent years. Topological superconductors are of particular interest because they may host Majorana bound states. Josephson junctions have been proposed as probes of topological superconductivity, and possible signatures of such Majorana bound states in topological Josephson junctions have indeed been observed. However, important aspects related to the effect of the environment on the properties of the junction are still not fully understood. The aim of the PhD work is to make progress in the understanding of quantum transport in voltage-biased topological Josephson junctions in the presence of an electromagnetic environment. More information can be found here: <http://inac.cea.fr/Pisp/julia.meyer/Sujet2018-Majorana.pdf> Interested candidates should have a good basis in quantum mechanics, statistical physics, and condensed matter physics. Applicants should send a cover letter, a CV, as well as Master's and Bachelor's transcripts by email to julia.meyer@univ-grenoble-alpes.fr. Electronic submission in a single pdf file is strongly preferred. In addition, each applicant should arrange for two letters of recommendation to be sent. The search will be continued until the position is filled.

19.02.17

NSF-funded Research Training Grant in Quantitative Biological Modeling, two postdoc positions, Engineering Sciences and Applied Mathematics, Northwestern University, Evanston, **Illinois**;
Starting: Sep 1, 2017 (and a third position starting September 1, 2018)
<https://openposition.mccormick.northwestern.edu/apply/index/NjE=>

02.11.17

Postdoctoral position in condensed matter theory at **Iowa** State University;

I am writing to advertise a postdoctoral position in strongly correlated condensed matter theory in my group at Iowa State University. I would greatly appreciate your bringing this opportunity to the attention of any strong candidates.

Candidates should have experience with many body quantum field theory techniques and an interest (although not necessarily experience) in collaborating with experimentalists. The condensed matter group at ISU/Ames lab is extremely strong and highly collaborative. Areas of interest include heavy fermions, frustrated magnetism and unconventional superconductivity, along with other strongly correlated materials.

The position is expected to begin in Fall 2018. Interested candidates should send a CV (including a list of publications) and a brief research statement to flint@iastate.edu, and arrange for two letters of reference to be sent to the same address as soon as possible. Applications will be considered until the position is filled.

13.01.18

Assistant Professor of Computational and Theoretical Physics (Tenure Track), Radboud Universiteit, Nijmegen, Netherlands;
Application deadline: 28 February 2018
http://www.ru.nl/werken/details/details_vacature_0/?recid=599626

10.01.18

Two Postdoctoral Research Scientist positions in the Condensed Matter Theory group at **Ohio State**. Both positions will be in the general area of quantum condensed matter physics, including correlated quantum materials, topological phases of matter, quantum dynamics and cold atoms.;

Review of applications will begin on Feb. 1, 2018

<https://academicjobsonline.org/ajo/jobs/10692>

19.02.18

Postdoctoral Fellow in Theoretical Quantum Optics; **Stockholm** University

Closing date: 31 March 2018

<https://www.su.se/english/about/working-at-su/jobs?rmpage=job&rmjob=4866&rmlang=UK>

11.03.18

Tenure Track Assistant Professor position at **Stockholm** University.

We currently have a vacancy for a tenure track assistant professor in theoretical physics, more specifically on “Quantum Phenomenology”.

Closing date: 10 May 2018

<https://www.su.se/english/about/working-at-su/jobs?rmpage=job&rmjob=4882&rmlang=UK>

16.01.18

Postdoc positions at **Tel Aviv** University's Sackler Center for Computational Molecular and Materials Science;

Review of applications will continue until the positions are filled. For primary consideration, applicants are encouraged to apply before February 1st, 2018.

<http://thesacklercenter.tau.ac.il/fellowships.html>

15.05.18

TU **Tampere**, Finland is looking for postdoctoral researcher in the field of deep learning implementations.

The position will be filled for fixed term of 1 year (Jun 2018 – Jun 2019), with possible extension. Also advanced doctoral students can be considered for the position.

The research is part of an Academy of Finland project, where we study lightweight implementations of deep neural networks for video and audio data processing, with applications in the strong working machines ecosystem of the Tampere region. The group uses Python based libraries; most importantly the Keras/Tensorflow stack and the PyTorch library.

Closing date for applications is 24 May 2018

<http://www.tut.fi/en/about-tut/careers-at-tut/open-positions/index.htm>

15.11.17

Postdoctoral positions in Condensed Matter Theory are available at the Department of Physics of the University of **Tennessee**, Knoxville, in the group of Professors Elbio Dagotto and Adriana Moreo. Areas of interest are iron and copper based high critical temperature superconductors, influence of spin-orbit coupling on phase diagrams of correlated electrons, quasi one-dimensional chains and ladders, non-equilibrium properties of correlated electrons, oxide interfaces, bulk complex oxides, multiferroic materials, and others.

We are interested in a variety of many-body techniques, such as Monte Carlo simulations, density matrix renormalization group, exact diagonalization, density functional theory, dynamical mean field theory, and others.

Information about our group can be found in <http://sces.phys.utk.edu>. The main location for this work will be the University of Tennessee, but our group has a close connection with Oak Ridge National Laboratory where part of the postdoctoral effort could be performed.

To apply candidates should submit via email their application, CV, and statement of research interests to applications@sces.phys.utk.edu

The candidate should arrange for three letters of recommendation to be submitted to the same email address as indicated above.

Any questions about the available positions should be submitted to applications@sces.phys.utk.edu only. Screening of applicants will start immediately and continue until the positions are filled.

07.03.18

Two postdoctoral openings, one at ORNL and the other at the University of **Tennessee**.

The position at ORNL is shared with Dr. Satoshi Okamoto and we are looking for a candidate that can carry out calculations employing DFT or model Hamiltonians, particularly in the context of interfaces and with the hope of interacting with experimental groups at ORNL with similar interests. We will also consider other areas of expertise. If you have a good candidate, ask to apply to

https://recruiting.ornl.gov/sap/bc/webdynpro/sap/hrrcf_a_posting_apply?PARAM=cG9zdF9pbnN0X2d1aWQ9MDA1MDU2QjQzOTc3MUVEODg3OTZDQTcwRjM3N0I0NjYmY2FuZF90eXB1PUVYVA%3d%3d&sap-client=010&sap-language=EN

or if the link does not work, directly send the CV to me using edagotto@utk.edu.

The position at Univ of Tennessee is shared with Prof. Adriana Moreo and we are looking for a candidate with expertise in computational techniques that can be applied to models for strongly correlated electrons, such as DMRG or Monte Carlo. Areas of interest are superconductors, quasi-1D materials such as chains and ladders, spin-orbit coupling effects, multi-orbital systems, etc. We will also consider other areas of expertise. If you have a good candidate, ask to apply by sending CV and research interest letter to applications@sces.phys.utk.edu or directly to me using edagotto@utk.edu.

We are in a hurry to fill these openings. We hope to make final decisions at the end of March.

16.11.17

I am pleased to announce a postdoc opportunity in our group at the University of **Texas** at Dallas. Our group does theoretical and computational work on a variety of problems in non-equilibrium quantum systems, including geometric and topological physics, periodically-driven (Floquet) systems, and many-body localization/thermalization. We work with multiple experimental groups towards applying these ideas to engineered quantum systems. Postdocs will also have ample opportunities for collaboration at UT Dallas, whose rapidly growing condensed matter group has expertise in topological physics, ultracold atoms, and nanoscience. The start date is flexible, but should be no later than September 2018. The initial appointment will be one year, and by mutual agreement may be extended up to three years total contingent upon availability of funding. If you know anyone who is interested in applying for the position, please have them send their CV, cover letter, and a list of at least 3 references to me at mkolodru@gmail.com. Please also do not hesitate to have them contact me with any questions about the position.

Dr. Michael Kolodrubetz Assistant Professor of Physics University of Texas at Dallas

19.10.17

Postdoctoral position in the condensed matter theory group at the Center for Quantum Materials, University of **Toronto**;

Applications are invited for a postdoctoral position in the condensed matter theory group at the Center for Quantum Materials, University of Toronto. The areas of research interest include topological phases in correlated electron systems, frustrated magnets, quantum spin liquid, quantum magnetism, quantum phase transitions, non-Fermi liquid physics, and superconductivity.

The position will start from Fall 2018 and the appointment is for two years. Interested applicants are asked to send

- 1) CV with publication list,
- 2) statement of research interest,
- 3) arrange 2-3 reference letters to be directly sent to ybkim@physics.utoronto.ca

The nominal deadline of the application is December 15th 2017, and applications will be considered until the position is filled.

28.09.17

Perimeter Institute (**Waterloo**) for Theoretical Physics is inviting applications for Postdoctoral Research positions. For more information please visit our http://perimeterinstitute.ca/postdoctoral-fellowship-2018?utm_campaign=ACAD%20-%20Post%20Doctorate%20Fellows&utm_source=hs_email&utm_medium=email&utm_content=56829601&hsenc=p2ANqtz--w7WulzjdnJOI76n0WKYzfiZIpGjheyhb6PO-yiCBb8ZYJb57aK73tTSrQZ0NKvaxE62-QFeJEcqvcVe8FliTgyeS6A&_hsmi=56829647

We hope you will share the news by:

1. Forwarding this information directly to prospective candidates who may be interested in this opportunity.
2. Printing and hanging the poster located here:
http://landing.perimeterinstitute.ca/hubfs/2018_Postdoctoral_Fellowships_poster.pdf?t=1506609063012&utm_campaign=ACAD%20-%20Post%20Doctorate%20Fellows&utm_source=hs_email&utm_medium=email&utm_content=56829601&hsenc=p2ANqtz-8T7OmEtjPemmctOSczfyYL6zJHrTYrgmlRqKnViWrbHO0e6Tf1XqGMlYXnMkc6i03RzEpxyR5uKDK8cSLdhZZtHk34ow&_hsmi=56829647.

Perimeter Institute offers a dynamic, multi-disciplinary environment with maximum research freedom and opportunity to collaborate. We welcome all candidates to apply by **November 15th, 2017** but applications will be considered until all positions are filled.

16.11.17

Perimeter Institute (**Waterloo**), Emmy Noether Fellowships (online by January 15, 2018) and Perimeter Scholars International programs are now accepting applications;
<http://perimeterinstitute.ca/about/careers/positions>

11.10.17

Perimeter Institute (**Waterloo**) for Theoretical Physics is inviting applications for a number of Junior Faculty positions (tenure track) in Condensed Matter Theory, Quantum Information Science and Theoretical Particle Physics. For more information please visit our website. [1]

We would be very grateful if you would circulate this information to outstanding young candidates who may be interested in this opportunity.

Perimeter Institute offers a dynamic, multi-disciplinary environment with maximum research freedom and opportunity to collaborate. We will begin to review the candidates for the CMT and QIS positions on December 15th, 2017 and for the TPP positions on January 15th, 2018. However, in all cases, applications will be considered until all positions are filled.

[1] http://landing.perimeterinstitute.ca/e1t/c/*W7Ns_0C5dGwZlW1vIB8c1H1k_60/*W7cW8qJ4d_4RVW6yhQWc1zDPPhZ0/5/fl8dQhb0S5fw8XJ8hgN78hn5KGX865N1yMd9n_-mcRN5H0SMfWQYFjW1td_fT7K0hXqW1HI_t31FQd_mW7b_h9Q61SRwjW7mGfcc2JZPrcW98RtjD6bMPqtW97k48y5C9f5BW4sgw3L1nrCGwW96zRPS6bT6L3W8RRjRD5Ckvr1W1fdmZQ1x4IQBW6HdqIT7nwG0k_W6bnMRg6jW0SdW1GnGqp8gjY6LW8WBKbV56sy_8W2NhXFJ82ydjJW8k1gXn4BK_TbW7Mbvxl4BNM4FW4BCLtw4zhRWnN5ls-vBqCyrJVnn-cqf13vRnvW6wyzRF57bKMpW2dRxzB1V5dtzN4byRgVqcKjGW2MsJLV2qTbmNW2L54ZZ4zxZwdW1DkQ9l2Lt5f7W4IBZ6F6wVfGFV3WYy-73QsnmW1d5pgb5bMW11W2kK2P-1M7I9QW1bBsCL6JksvQW1mGQdp2LdjVIW3F--fl8C4XKnW80w6zy8bMltLW6cdD_Q8BDnFHW8SjDXM6fDCXMVMPVbVrLq8W42PlgJ2x86cq0

05.09.17

Postdoc position at University of **Zurich**;

The Condensed Matter Theory Group at the Department of Physics of the University of Zurich invites applications for a postdoctoral researcher position in the field of topological and strongly correlated states of matter.

The successful applicant will work in the group of Prof. Titus Neupert which pursues research in the following fields: (1) topological insulators and semimetals, (2) unconventional superconductivity, (3) machine learning applications to quantum matter, (4) Quantum field theory descriptions of topological order, (5) numerical studies on the fractional quantum Hall effect and other correlated quantum liquids. See <http://www.physik.uzh.ch/en/groups/neupert.html> for more information.

The postdoctoral researcher is expected to conduct leading research in one or more of these areas with a large degree of independence and initiative. In particular, a background in numerical methods such as first-principle calculations, DMRG, or exact diagonalization, as well as strong programming skills are welcome. The work will greatly benefit from the rich local research environment (University of Zurich, Paul Scherrer Institute, ETH Zurich) and will further be embedded in international collaborations with both theoretical and experimental groups.

The successful applicant will be employed for two years and will receive an independent budget for research-related expenses (e.g., travels). The competitive salary follows the salaries for postdocs at the Department of Physics of the University of Zurich. Required qualification is a PhD in physics or equivalent. The position will start in the first half of 2018 or at some later date to be agreed upon.

To apply, please send a CV, a list of publications, a research statement, and the contact details of at least three references to Titus Neupert (neupert@physik.uzh.ch). For more information, please write to the same address. Applications are considered until the position is filled.