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:

Centro de Física das Universidades do Minho e do Porto (CF-UM-UP)
https://www.cf-um-up.pt/

- One position CSRC, Beijing, CHINA and CF-UM-UP, Porto, PORTUGAL
(Period April 2019- March 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. These also include the effects of disorder in strongly correlated systems and its connections with the many-body localization phenomenon, thermalization in isolated fermionic systems, applications to topological matter and 2D materials, the physics of High-Tc's and interactions in frustrated lattices and its connections with spin liquid phases.

The Beijing Computational Science Research Center (www.csrc.ac.cn) provides its own facilities for high-performance computing and has a long tradition in computationally intensive methods. Applicants from all countries are welcome.

Host at CSRC (Beijing): Rubem Mondaini, https://www.csrc.ac.cn/en/people/faculty/28.html [www.csrc.ac.cn]
Host at CF-UM-UP (Porto): Eduardo V. Castro, http://eduardovcastro.weebly.com/, [https://www.cf-um-up.pt/]

The position is opened for a two-year appointment, with annual strict evaluations on performance and with the possible extension for a third year also depending on the mutual agreement of both parties. The plan is for the postdoc to spend half the time in Portugal and half the time in China, and to start preferentially in April 2019

Salaries are competitive and depend on the Postdoc’s previous experience.

Requirements:
i) be no more than 35 years of age at the time of application and should have obtained their Ph.D. after 2012.
ii) possess a PhD in Physics and a solid knowledge in the many-particle formalism.

iii) work closely with R. Mondaini and E. V. Castro and collaborate with other division members;

iv) have a strong background in programming and numerical skills in general with desirable experience in intensive and parallel computing (Fortran, C, C++, Python). Applicants with a previous background in at least one of the following techniques,

* QuantumMonte Carlo (either DQMC, PQMC, DCA, SSE, …)
* DMRG
* Exact Diagonalization (with and without symmetries)

have a major advantage. Applications, including detailed curriculum vitae, list of publications, a brief statement of research plan and at least two letters of recommendation, should be sent to: mondaini@csrc.ac.cn <mailto:rmondaini@csrc.ac.cn> and evcastro@fc.up.pt <mailto:evcastro@fc.up.pt> .