

## PERSON SPECIFICATION

Details on the qualifications, experience, skills, knowledge and abilities that are needed to fulfil this role are set out below.

**Job Title:** Post-Doctoral Research Assistant in Theoretical Physics **Department:** Physics

	Essential	Desirable	Tested by (Application form, Interview, Test)
<b>Knowledge, Education, Qualifications and Training</b>			
PhD or equivalent in theoretical physics (or related field)	X		Application form
Prior training in advanced quantum theory, statistical physics and the quantum many body problem (e.g. in condensed matter)	X		Application form, Interview
<b>Skills and Abilities</b>			
Computer programming skills (e.g. C/C++, Python or Mathematica)	X		Application form, Interview
High performance computing (e.g. MPI)		X	Application form, Interview
Ability to communicate verbally and in writing	X		Application form, Interview
Fluency in English	X		Application form, Interview
<b>Experience</b>			
Experience in performing analytical calculations using a theoretical physics technique (e.g. perturbative expansion, tensor networks, random matrix theory, dynamical mean field theory, renormalization group, Keldysh formalism...)	X		Application form, Interview
Experience in a computational numerical technique for the many body quantum problem (e.g. exact diagonalization, DMRG, DFT, DMFT)	X		Application form, Interview
Evidence of international networking		X	Application form, Interview
Evidence of production of high quality research outputs (conference papers, publications)		X	Application form, Interview
<b>Other requirements</b>			
Ability to work in a collaborative team	X		Application form, Interview
Willingness to engage in knowledge transfer and outreach		X	Application form, Interview