

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 Associate
in Theoretical Physics

Department: Physics

	Essential	Desirable	Tested by Application Form/Interview/Test
Knowledge, Education, Qualifications and Training			
PhD or equivalent in theoretical physics (or related field)	X		Application
Prior training in advanced quantum theory, statistical physics and the quantum many body problem (e.g. in condensed matter)	X		Application Form/Interview
Skills and Abilities			
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
Experience			
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	
		X	Application Form/Interview

Evidence of production of high quality research outputs (conference papers, publications)			Application Form/Interview
Other requirements			
Ability to work in a collaborative team	X		Application Form/Interview
Willingness to engage in knowledge transfer and outreach		X	Application Form/Interview