

Lucy Harris
Queens' College, Silver St.
Cambridge
CB3 9ET
lucy-harris@live.co.uk

13/3/2020

Programme Committee
University of Reading
Reading
RG6 6UR

Dear Programme Committee,

I would like to apply to join the Summer School on Effective HPC for Climate and Weather, in August 2020.

I am a current final-year PhD student in the Cambridge University Engineering Department, working on using numerical simulations to investigate wave interaction with porous media. I have just accepted an offer to take up a position as a Post-Doctoral Research Assistant at the University of Oxford.

I will be working at Atmospheric, Ocean and Planetary Physics under the supervision of Professor Tim Palmer, a fellow of Jesus College. I will be working with the ERC ITHACA (An Information Theoretic Approach to Improving the Reliability of Weather and Climate Simulations) team in Oxford, on a research project which uses machine learning methods to simplify some of the parametrisation and Earth-System components of current weather and climate models. A possible specific area of research would be to see if the ECWMF ocean-wave model, can be represented at reduced computational cost.

Although I have had some exposure to Machine Learning techniques during my PhD, I believe that taking part in this summer school would be immensely valuable to me as preparation for my next set of research goals. The summer school looks very relevant to my future work and seems an invaluable opportunity to learn from more experienced researchers. I am particularly interested in the sessions on Machine Learning and Artificial Intelligence.

Thank you for taking the time to review my application.

Sincerely,

Lucy Harris