

Fully funded PHD position to join the Fluids and Magnetohydrodynamics group in the Department of Mathematical Sciences at Durham University

The Fluids and Magnetohydrodynamics (MHD) group in the Department of Mathematical Sciences at Durham University has a fully funded 3.5-year STFC studentship available in the area of solar/astrophysical MHD with a prospective start date of Oct. 2024 or sooner depending upon circumstances. This will include fee payments (for either home or overseas students), a living allowance (currently £17,668 per year) and an additional fund to cover research costs and conference travel.

Applications will begin to be assessed after 3rd Nov. 2023 and the position will remain open until filled.

The Fluids and MHD group is a close knit team that forms part of the Applied Mathematics group within the Mathematics Department at Durham. The group has an internationally recognised reputation in the theoretical study of astrophysical plasmas. In particular, in the study of the solar atmosphere and solar/stellar interiors via numerical simulations, theoretical approaches and observational analysis.

The preferred supervisors (who will help set the topic for study) are:

Dr Peter Wyper whose interests include theoretical modelling, numerical simulations and/or observational analysis of solar flares/coronal mass ejections, solar flare ribbons and dynamic structures within the solar wind. For more details and potential PhD topics see: <https://www.maths.dur.ac.uk/users/peter.f.wyper/examples.html>.

Dr Laura Currie whose interests include convection in stellar and planetary interiors and how large-scale flows and magnetic fields (like the ones observed in many astrophysical bodies) are generated. This typically involves studying convection in the presence of rotation, magnetic field and/or stratification and makes use of theoretical analysis and numerical simulations. For more details and potential PhD topics see: <https://www.maths.dur.ac.uk/users/laura.currie>.

For informal inquiries, or if you are interested in applying, please contact Dr Wyper (peter.f.wyper@durham.ac.uk) or Dr Currie (laura.currie@durham.ac.uk) directly who will be happy to discuss the application process with you.