JENNY WONG

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CAREER AND EDUCATION

ISTerre, Université Grenoble Alpes *2020 - present*
Postdoctoral researcher
Working with R. Deguen developing two phase models of core-mantle differentiation. Funded by ERC.

Dynamique des fluides géologiques, Institut de Physique du Globe de Paris *2019 - 2020*
Postdoctoral researcher
Working with J. Aubert on large scale numerical simulations of core dynamics and the geodynamo. Funded by La Fondation Simone et Cino Del Duca.

EPSRC Centre for Doctoral Training in Fluid Dynamics, University of Leeds *2014 - 2018*
PhD in Fluid Dynamics
Title: A slurry model of the F-layer in the Earth's core
Supervisors: C.J Davies and C.A Jones
MSc in Fluid dynamics
Title: Capillary driven jet break-up
Supervisors: O.G Harlen, N. Kapur and M.C.T Wilson

School of Mathematics, University of Leeds *2009 - 2013*
MMath, BSc in Mathematics (First class honours)

ADDITIONAL RESEARCH EXPERIENCE

LGL-TPE, Université Claude Bernard Lyon
Research placement *October 2017*

- Disseminated my research on slurry dynamics to T. Alboussière, S. Labrosse and R. Deguen during the preparation of a journal paper.
- Collaborated ideas and future work on how a slurry F-layer may have evolved over time, which is intimately linked with the thermal history of the core.

Solvay Specialty Polymers
Research placement *February 2015*

- Gained knowledge about fluoropolymer research in an industrial setting.
- Conducted heat transfer experiments using a chiller on a range of diaelectric fluids with different polymer structures and boiling points. Performed fractional distillation of a fluid mixture to determine the grades of polymer present.
- Created a lab report analysing the experimental results.

University of Huddersfield
Research placement *Summer 2012*

- Applied knowledge of fractal theory to research in the field of metrology.
- Developed an algorithm using MATLAB for a morphological profile filter used to process measurements of surface roughness.

PUBLICATIONS

- **Wong, J.**, Davies, C.J. & Jones, C.A. (2021). A regime diagram of the slurry layer at the base of Earth's outer core. *Earth and Planetary Science Letters*, **560**, doi: 10.1016/j.epsl.2021.116791
- Hardy, C.M. & **Wong, J.**. (2019). Stably stratified layers within Earth's core. *Astronomy and Geophysics*, **60**(3), 30-35, doi:10.1093/astrogeo/atz148
- **Wong, J.**, Davies, C.J. & Jones, C.A. (2018). A Boussinesq slurry model of the F-layer at the base of Earth's outer core. *Geophysical Journal International*, **214**(3), 2236-2249, doi:10.1093/gji/ggy245
- Greiciunas, E., **Wong, J.**, Gorbatenko, I., Hall, J., Wilson, M.C.T., Kapur, N., Harlen, O.G., Vadillo, D. & Threlfall-Holmes, P. (2017). Design and operation of a Rayleigh Ohnesorge jetting extensional rheometer (ROJER) to study extensional properties of low viscosity polymer solutions. *Journal of Rheology*, 61(3), 467-476, doi:10.1122/1.4979099

PRESENTATIONS AND CONFERENCES

EPM seminar — *February 2021*
ETH Zurich, Switzerland (online) — (speaker)

AGU — *December 2020*
(online) — (poster)

Bromery Lecture — *October 2020*
Johns Hopkins University, Baltimore, USA (online) — (speaker)

SEDI 2020 — *October 2020*
(online) — (invited speaker)

AGU — *December 2019*
San Francisco, USA — (speaker)

Seminar — *November 2019*
ISTerre, Grenoble, France — (speaker)

Dynamo Action: from the lab to the stars — *September 2019*
PLAS@PAR, Paris, France — (speaker)

The Evolving Earth workshop — *June 2019*
Institut de Physique du Globe de Paris, Paris, France — (poster)

UK-SEDI 2019 — *May 2019*
Royal Astronomical Society, London, UK — (invited speaker)

UK Fluids Conference — *September 2018*
University of Manchester, Manchester, UK — (speaker)

SEDI 2018 — *July 2018*
University of Alberta, Edmonton, Canada — (poster)

Dynamics and evolution of Earth's coupled core-mantle system — *May 2018*
Royal Astronomical Society, London, UK — (poster)

Congrès des doctorants — *March 2018*
Institut de Physique du Globe de Paris, Paris, France — (speaker)

Fifty years after Roberts' MHD: Dynamos and planetary flows today — *November 2017*
Royal Astronomical Society, London, UK

Geolunches Seminar — *October 2017*
LGL-TPE, Université Claude Benard Lyon, France — (speaker)

Frontiers in planetary core dynamics *May 2017*
Autrans, Grenoble, France (speaker)

UK-SEDI 2017 *May 2017*
Royal Astronomical Society, London, UK

UK Fluids Conference *September 2016*
Imperial College London, London, UK (poster)

ACADEMIC SERVICE

Reviewer		*2019*
Convener	AGU	*2019*
Chair	Congrès des doctorants	*2019*

Workshop Tutor *2017 - 2018*
Maths tutoring for undergraduate students from a wide variety of disciplines during weekly open 'drop-in' style sessions at the university library.

Demonstrator *2016 - 2017*
Delivery of course materials for undergraduate courses in Fluid Dynamics MATH2620 and Vector Calculus MATH2365.

OTHER INFORMATION

Programming Languages	Python, MATLAB, C++, Fortran, OpenMP, HTML, Visual Basic
Software & Tools	PARODY, LaTeX, Paraview, Blender, Excel, ANSYS Fluent, Git
Languages	English (native), Chinese (fluent), French (intermediate)
Memberships	Fellow of the Royal Astronomical Society, AGU

REFERENCES

Available upon request.