

| PROJECTS IN STFC remit | | |
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| Please talk to supervisors who work on your area of interest, as there may be updates or possibilities for alternative projects | | |
| Prof. Gareth Collins, Dr Navjot Kukreja (Department of Computer Science, University of Liverpool), Associate Prof. Nicholas Warner (Department of Geological Sciences, SUNY Geneseo, USA) | Automated Crater Detection and Classification with Machine Learning | Info Sheet - Collins ACDC |
| Prof. Gareth Collins | Decoding inner solar system bombardment from impact crater populations | [Info Sheet - Collins Crater Scaling] |
| Prof. Gareth Collins | Meteoroid fragmentation in planetary atmospheres and the formation of crater clusters on Earth and Mars | [Info Sheet - Collins Meteoroid Fragmentation] |
| Prof. Gareth Collins, Dr Tom Davison, Prof. Phil Bland (Curtin) | Multiscale modeling of compaction of primitive solar system materials | [Info Sheet - Collins Multiscale] |
| Dr. Jacob Kegereis, Prof. Gareth Collins, Dr. Paul Estrada (NASA) | Simulating impacts onto Saturn's icy moons and rings | [Info sheet - Ice Impacts] |
| Prof. Gareth Collins, Mark Wieczorek (IPGP) | Impact Processing of Planetary Crust | [Info Sheet - Collins Impact Porosity] |
| Dr Joel Davis, Prof. Sanjeev Gupta, Dr Peter Grindrod (Dept. of Earth Science, Natural History Museum), Ass. Prof. Gaia Stucky de Quay (Dept. of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology) | The evolution of the Kasei Valles outflow channel: A window into the changing palaeo-climate of Mars | [Info Sheet - Davis UKSA Kasei Studentship] |
| Dr Matthew Genge | Microspherules in the geological record | [Info Sheet - Genge Microspherules] |
| Dr Doyeon Kim, Dr Ana-Catalina Plesa (DLR), Dr, Mark Wieczorek (IPGP) | Probing Mars' interior structure and planetary seismicity/tectonics | [Info Sheet - Kim Mars Interior Seismicity] |
| Dr Doyeon Kim, Dr Ian Bastow, Ass. Prof. Nick Schmerr (University of Maryland) | Earth-based Geophysical Investigation of the Near Subsurface Structures for Future in situ Resource Utilization on the Moon | [Info Sheet - Kim Planetary Analog ISRU Moon] |
| Dr Doyeon Kim, Prof. Gareth Collins, Prof. Tom Pike (EEE), Dr Mark Panning (JPL) | Lunar seismology: from Apollo mission to the Farside Seismic Suite and beyond | [Info Sheet - Kim Lunar Seismology] |
| Dr Philippa Mason, Prof. Richard Ghail (Earth Sciences, Royal Holloway UK), Dr Gareth Roberts | Understanding surface processes on Venus: in support of the EnVision mission | [Info Sheet - Mason Surface Processes Venus] |
| Prof. Adrian Muxworthy, Prof. Tom Mitchell (UCL) | Field and experimental determination of the role of low pressures (< 1GPa) on the fidelity of magnetic recording in rocks and meteorites | [Info sheet - Magnetic Recording in Rocks and Meteorites] |
| Prof. Adrian Muxworthy, Prof. Dominik Weiss, and Dr. David Heslop (ANU, Canberra) | Determining ancient field intensities from chemical remanent magnetisations in rocks and meteorites | [Info sheet - Ancient Field Intensities] |
| Prof. Mark Rehkämper | Mixing and Volatile Depletion in the Early Solar System | [Info Sheet - Rehkämper Mixing Volatile Depletion ESS] |
| Prof. Mark Rehkämper | Tracing the Origin of Volatiles for the Earth, Moon and Mars – New Constraints from Isotopic Analyses of Meteorites | [Info Sheet - Tracing the Origin of Volatiles] |
| Prof. Mark A. Sephton, Dr Jonathan Watson, Prof Jonathan Carter, Prof Hunter Waite (Alabama) | Artificial Intelligence for Life Detection at Europa | Info sheet - AI Techniques for Europa |
| Prof. Mark A. Sephton, Dr Jonathan Watson, Keyron Hickman-Lewis (Birkbeck) | Combined Techniques for the Detection of Biosignatures: Preparation for Mars Sample Return | [Info sheet - Combined Techniques for the Detection of Biosignatures] |
| Prof. Mark A. Sephton, Dr Jonathan Watson, Prof Hunter Waite (Alabama) | Life Detection at Jupiter's Icy Moon Europa | [Info sheet - Life Detection at Europa] |