

STFC PhD Projects List 2023

Project Title	Lead Supervisor
Automated Crater Detection and Classification with Machine Learning	Professor Gareth Collins
Impact Processing of Planetary Crust	Professor Gareth Collins
Multiscale modelling of compaction of primitive solar system materials	Professor Gareth Collins
Decoding inner solar system bombardment from impact crater populations	Professor Gareth Collins
Modelling the Giant South Pole-Aitken basin	Professor Gareth Collins
Meteoroid fragmentation in planetary atmospheres and the formation of crater clusters on Earth and Mars	Professor Gareth Collins
Microspherules in the geological record	Dr Matthew Genge
Understanding surface processes on Venus: in support of the EnVision mission	Dr Philippa Mason
The origin of Earth's volatiles – new constraints from isotopic analyses of meteorites	Professor Mark Rehkämper
Mixing and Volatile Depletion in the Early Solar System	Professor Mark Rehkämper
Recognising Life in Samples Returned from Mars	Professor Mark A. Sephton
Extracting Records of Life on Mars	Professor Mark A. Sephton
Organic Preservation in Jezero Crater – Site of the Mars 2020 Perseverance Rover	Professor Mark A. Sephton
Life Detection at Jupiter's Icy Moon Europa	Professor Mark A. Sephton
Astrobiology and meteorites from the early Solar System	Professor Mark A. Sephton