Samuel Lee Jackson

Milton Keynes, Buckinghamshire

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PERSONAL INFORMATION

I am a post-doctoral research associate with an interest in the study of small solar system bodies (comets and asteroids). I focus largely on developing software to characterise asteroids from observations with ground and space-based telescopes, and I have experience in the operation, management and development of astronomical observatories. In my spare time I play cricket and regularly travel around the country to watch Southend United Football Club.

EMPLOYMENT HISTORY

The Open University **Milton Keynes, Buckinghamshire**
Post-Doctoral Research Associate *2023 - Current*

Developing techniques to characterise the nature of the surfaces of asteroids from thermal-infrared telescope observations. Achieved through thermal modelling of the target bodies and comparison to observations to derive physical properties.

University of Edinburgh **Milton Keynes, Buckinghamshire (Remote)**
Post-Doctoral Research Associate (Part-Time) *2022 - 2023*

Researching the aftermath of the NASA DART impact into an asteroid using observations with a portable telescope in Kenya. As part of this role I have also been involved in providing ground work for a future permanent optical telescope in Kenya, which will be the first of its kind in the country.

The Open University & University of Edinburgh **Milton Keynes, Buckinghamshire**
Night Duty Astronomer/Emergency Support Astronomer *2019 - 2022 (Multiple Contracts)*

Responsible for ensuring safe operation of the OpenScience Observatories during student use for multiple universities. Provided on-call emergency support to allow round-the-clock access to the observatories for the students, resolving hardware and software issues in a timely manner.

The Open University **Milton Keynes, Buckinghamshire**
Course Facilitator *February - March 2020*

Facilitating discussion and providing expert comment for thousands of students on the Massive Open Online Course 'In the night sky: Orion' on FutureLearn.

Adams Joinery Ltd. **Leigh-on-Sea, Essex**
Dispatch & Quality Control *July-September 2013, 2016, 2017, 2018*

EDUCATION

PhD in Astronomy & Planetary Science
The Open University, Milton Keynes *2019 - 2023*

Astronomy, Space Science, and Astrophysics MPhys (First Class Honours)
University of Kent, Canterbury *2015 - 2019*

GCSE & A-Level Education

Westcliff High School for Boys, Westcliff-on-Sea *2008 - 2015*

KEY SKILLS

Computing skills:
- Programming languages: Python, C++, CUDA C/C++, MATLAB, Bash
- Operating systems: Linux, Windows

Other skills:
- Astronomical observations
- Data analysis and statistics
- Public speaking
- Technical writing
- Working as part of collaborations of all sizes

AWARDS AND MEMBERSHIPS

- Asteroid 30226 Samuelleejackson (2000 GY137) named after me for my contributions to planetary science (2023)
- Associate Member of the Division for Planetary Sciences of the American Astronomical Society (2022 - Current)
- Rotary Prize for the Faculty of Sciences, University of Kent (2019)
- Dean's Prize for the Faculty of Sciences, University of Kent (2018)
- Fellow of the Royal Astronomical Society (2017 - Current)

PUBLICATIONS

Peer reviewed publications:

- **Jackson, S. L.**, Kolb, U. C., & Green, S. F. (2021). Asteroid Photometry with PIRATE: Optimizations and Techniques for Small-Aperture Telescopes. *PASP*, 133, 075003
- **Jackson, S. L.**, Rozitis, B., Dover, L. R., Green, S. F., Kolb, U. C., Andrews, A. E., & Lowry, S. C. (2022). The Effect of Aspect Changes on Near-Earth Asteroid Phase Curves. *MNRAS*, 513(2), 3076
- Dover, L., Lowry, S. C., Rożek, A, Rozitis, B., **Jackson, S. L.**, et al. (2023). Physical modelling of near-Earth asteroid (23187) 2000 PN9 with ground-based optical and radar observations. *MNRAS*, in press

REFERENCES

References/referee contact details available on request.