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# The Habitable Worlds Observatory & Small Mission Opportunities

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# Introduction



- Long record in space research
  - Both instrumentation & science
- Voyager, ROSAT, EUVE, HST, FUSE, Gaia, JWST
  - Senior oversight in UKSA, ESA, NASA
- 66 years of space research at UoL
  - > 90 missions, 11 currently in space
- Development of Space Park Leicester
  - Shared academic/business facilities
  - > 300 space researchers, 25 businesses
- Midlands Space Cluster
  - > 300 businesses
- Midlands Innovation Space Group
  - ~ 1000 space scientists across region

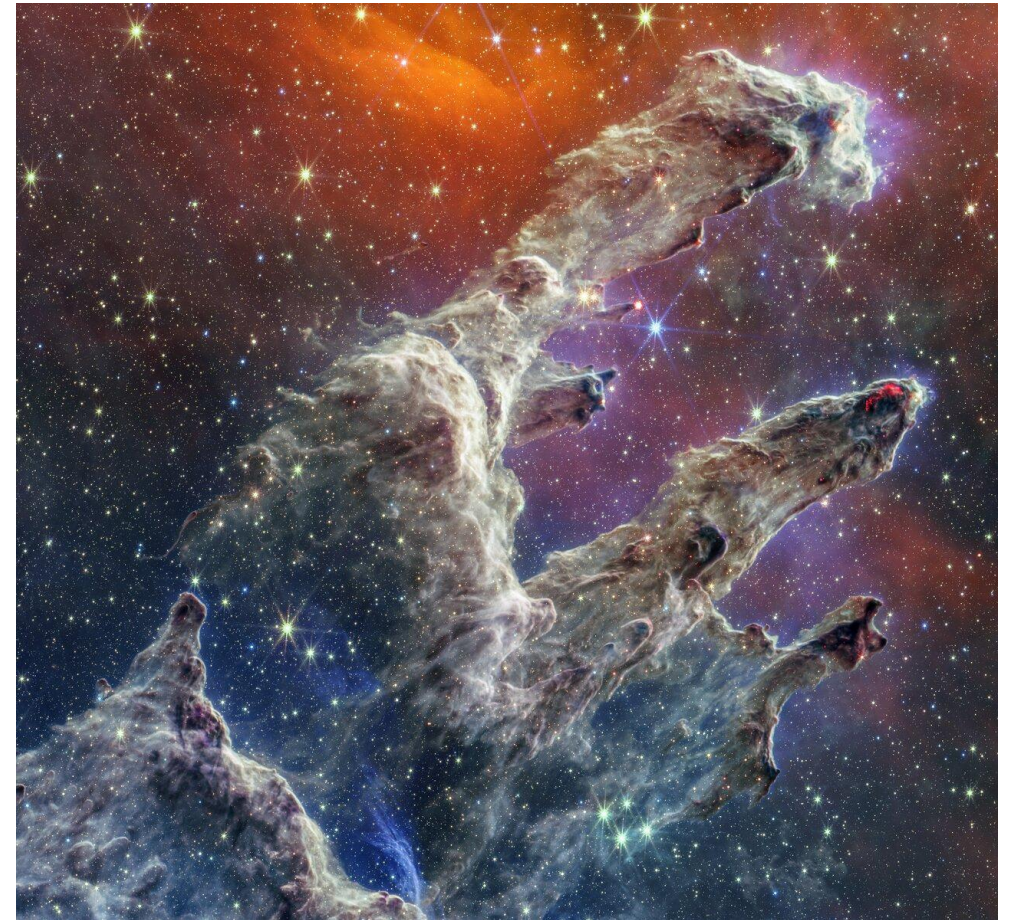




# HWO and the UK

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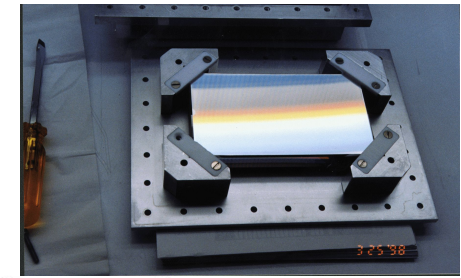
- UK has long record of collaboration
- Bi-lateral missions, ESA, HST, JWST (MIRI)
- Early involvement in roadmap (HDST, LUVOIR)
- Developing UK community – funded by STFC grant
  - 3 community workshops (4<sup>th</sup> in June)
  - Strong representation on WGs & at HWO conf.
  - Enormous UK science & technical interest
  - Academic/industry collaborations
- UKSA – funded instrument studies (HRI & MOS)
  - Contribution modelled on MIRI
- Developing European collaborations





# Observatory class science from small missions

- Innovative optical systems



9 Mo2C/Si

