**CEOI Emerging Technologies Conference at Cosener’s House, Abingdon 19/20 March 2024**

We have a few remaining speaker slots at our a 2-day Emerging Technology Challenge Workshop for Earth Observation at Cosener¹s House in Abingdon on 19th and 20th March 2024. If you are unable to provide a presentation, or slots are filled, please consider providing a poster, but let us know in advance the title, format, and size of your poster (and talk!).

The goal of this meeting is to reveal and discuss new and emerging developments in EO instrumentation and mission concepts, and to examine how these developments will benefit the UK in terms of science, societal and commercial terms.

The conference is open to all interested parties. We are planning sessions on:

* New detectors and detector concepts
* New on-board calibration techniques
* EO payloads for small spacecraft - miniature high-performance instrumentation.
* Instrument technology and mission architecture considerations for commercial missions
* Recent advances in additive layer and other advanced manufacturing techniques for EO instrumentation
* Advanced on-board image processing concepts for imaging missions, such as super-resolution and AI/deep learning
* Latest developments in LIDAR for EO
* New techniques and future concepts - more left-field/exotic techniques from around the laboratories.
* Quantum techniques for EO such as gravity sensing
* New mission opportunities

The meeting occurs at a time when the UK has made a significant uplift in EO funding, and we will explore how to capitalize on this investment. There will be a discussion session with UKSA and CEOI regarding the future evolution of CEOI, and how it can best serve the community. Additionally, we will have a discussion session on options for funding of missions based upon instrumentation developed in CEOI and other UK programmes. We are particularly interested in non-traditional and commercial funding routes.

We expect to have representatives from UKSA and ESA in attendance.

We invite presentations from:

* groups engaged in current and recent CEOI technology projects. Note that emphasis will be on novel technologies, techniques, future impacts, and benefits rather than project progress reporting – we will ask the ‘so what?’ question.
* groups involved in relevant technology development outside of CEOI (including in NSTP, ETP, NSIP, Innovate UK, ESA etc. and industry and academia);
* researchers and industry developing next generation instrumentation;
* Institutes and agencies with EO space technology requirements
* We are particularly keen to improve our diversity, so we therefore encourage presentations from all genders and ethnicity.

Talks will be 15-20 minutes. The agenda will be adjusted according to the response. Please send Rob Scott ([rob.scott@stfc.ac.uk](mailto:rob.scott@stfc.ac.uk)) your title and author names and affiliation (papers and posters) for consideration, along with your preferred day for presentation. The Agenda is getting, full, but there is some flexibility still. In addition to oral sessions, there will be display boards for posters.

Spaces are limited, so early registration (free) is advisable. The conference dinner on the evening of the 19th March will be charged at cost, and we will have a limited number of places for overnight stay (bed and breakfast), so first come first served (see next page).



<https://stfc.ukri.org/about-us/where-we-work/rutherford-appleton-laboratory/the-cosener-s-house/>

Note that there is very limited parking available at Cosener’s House. There is a public car park nearby.

**Accommodation and Dinner**

Please contact Niki Legge at RAL Space to register and book accommodation and dinner, detailing any special access and dietary requirements. For general enquiries about the programme, please contact Rob Scott.

* Niki Legge: [niki.legge@stfc.ac.uk](mailto:niki.legge@stfc.ac.uk), Tel 01235 445621
* Rob Scott: [rob.scott@stfc.ac.uk](mailto:rob.scott@stfc.ac.uk), Mob 07789 75

Cost:

* Conference registration ­- free (including morning and afternoon refreshments and a buffet lunch).
* Conference dinner on the 19th: approximately £30 per head
* Accommodation – updated prices (including breakfast) for 2024:
* Single en-suite rooms & 2 shared facility rooms at £72.00
* Double en-suite rooms @ £102.00
* NB There are no rooms left for the night of the 18th. If rooms at Cosener’s are sold out for the meeting I recommend you search Booking.com or similar, to find accommodation in Abingdon nearby.

We must release reserved accommodation by mid-February, so the deadline to book accommodation at Cosener’s is therefore 14th February. You will be charged for dinner and accommodation on arrival at the meeting. Meals are prepared according to notified numbers, so if you do not show up you will still be charged. Hence, if you cannot attend, please let us know well in advance.