

# Centre For Earth Observation Instrumentation & Space Technology

## CEOI Technology Conference

21<sup>st</sup>/22<sup>nd</sup> April 2015

Cosener's House, 15-16 Abbey Close, Abingdon, Oxfordshire OX14 3JD

### Day 1: 21<sup>st</sup> April 2015

9:30 Coffee & Registration

#### Session 1: Welcome and Introductions

10:00	Welcome from the CEOI-ST Director	Mick Johnson	CEOI-ST
10:10	CEOI Technology Review	Chris Brownsword	CEOI-ST

#### Session 2: Recent CEOI Projects

10:20	LOCUS: A Low Cost Upper Atmosphere Terahertz Sounder For In-Orbit Demonstration	Edmund Linfield & Brian Ellison	University Of Leeds/RAL Space
10:40	Heavy Ion Radiation Testing of the Large Format Near Infrared Detector	Peter Knowles	SELEX ES
11:00	Mechanised Alignment for Component Positioning and Joining	Dave Robertson	University Of Glasgow
11:20	Coffee & Tea Break		
11:50	183 GHz Frequency Selective Surface (FSS)	Raymond Dickie	Queens University Belfast
12:10	Contactless Power and Data Transfer for an Instrument Scan Mechanism	Andrew Bacon	Thales Alenia Space (UK) Ltd
12:30	WIVERN: A Conically Scanning Dopplerised 94ghz Cloud Radar Mission To Measure Global In-Cloud Winds	Alessandro Battaglia	University Of Leicester
12:50	Spectroscopic Measurements with the SHIRM	Olivier Auriacombe	RAL Space & The Open University
13:10	Lunch		

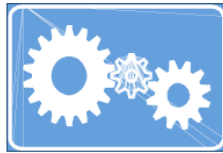
#### Session 3: Recent Projects Continued

14:10	TRUTHS Progress	Nigel Fox	National Physical Laboratory
14:30	Wavemill	Meric Srokosz	National Oceanography Centre
14:50	MISRLite	Richard Cole	UCL MSSL
15:10	Photon Counting Techniques from Space Science	Jon Lapington	University Of Leicester
15:30	SGR-ReSI Latest Results from TDS-1	Martin Unwin	Surrey Satellite Technology Limited
15:50	Discussion & Coffee & Tea Break		

#### Session 4: New Projects Poster Sessions (Inc EO NSTP Projects)

16:20	Demonstration and Assessment of Laser Heterodyne Radiometry for CO <sub>2</sub> Sounding	Alex Hoffmann	RAL Space
16:25	Understanding NovaSAR-S	Sam Lavender	Pixalytics
16:30	Real Time Demonstration of SAR Image Focussing on an FPGA	Alex Wishart	Airbus Defence & Space
16:35	CMOS Image Sensors with High Quantum Efficiency	Konstantin Stefanov	Open University
16:40	L-Band One-per-Element	David Hall	Airbus Defence & Space
16:45	Next Generation Radar Electronics	Mike Gibbons	Airbus Defence & Space
16:50	Enabling High Rate Telemetry from EO Missions With HF Comms	Spiros Ventouras	RAL Space
To 17:30	Discussion, Posters & Close of Day 1		
19:30	Dinner at Cosener's House		





**Day 2 22<sup>nd</sup> April 2015**

09:00 **Welcome – Day 2** Rob Scott CEOI-ST/RAL Space

**Session 5: Convoy and Constellation Missions**

09:10	<b>ESA Convoy Missions &amp; Technology Needs</b>	Amanda Regan	ESA ESTEC
09:40	<b>The NASA Cyclone Global Navigation Satellite System (CYGNSS) Mission</b>	Marie-Paola Clarizia	University of Michigan/National Oceanographic Centre
10:10	<b>The Compact Infrared Imager and Radiometer - Earth System Science from a 6U Cubesat</b>	Neil Bowles	University of Oxford
10:30	<b>Discussion with Coffee &amp; Tea Break</b>		

**Session 6: Emerging Technologies**

11:10	<b>TRUTHS Imager Design</b>	Dan Lobb	SSTL
11:30	<b>Graphene as an Enabler for EO</b>	Jamie Williams	University of Leicester
11:50	<b>New Developments in Large Format IR Detectors</b>	Keith Barnes/Peter Knowles	SELEX ES
12:10	<b>Cold Atom Technologies at ESA</b>	Bruno Leone	ESA ECSAT
12:30	<b>Gravity Measurements with Cold Atoms</b>	Tristan Valenzuela-Salazar	RAL Space
13:00	<b>Lunch</b>		

**Session 7: Future Bilaterals – National and ESA**

14:00	<b>The EOMAG Activity and National Ambitions for EO Bilaterals</b>	Mick Johnson	CEOI-ST
14:30	<b>Bilateral Carbon Mission</b>	Hugh Kelliher	(Leics/Edinb+)
14:50	<b>UTLS Activities at RAL (SHIRM, STEAMR, ALISS, MARSCHALS, StratoClim, Micro-FTS)</b>	Daniel Gerber	RAL Space
15:10	<b>ICEMuSIC – A New THz instrument concept for Climatology and Meteorology Applications</b>	Peter Hargrave	University of Cardiff
15:30	<b>Progress on ComPAQS</b>	Claire Parfitt	University of Leicester
15:50	<b>Discussion</b>		
16:15	<b>Coffee and posters</b>		
17:00	<b>Summing up - Close of Conference</b>		