



Prof. Adrian Podoleanu's Career Celebration

<http://cc22.aogkent.uk/>

Programme and Participant Welcome Pack

Welcome!

We're delighted to welcome you to Prof Adrian Podoleanu's career celebrations event, and grateful that you are here with us celebrating Adrian's career achievements to date.

There will be a few dozen in-person participants to the event, which will take place on the University of Kent campus, while many others, located across various continents, will join online. For those joining us here in person, there will be a gala dinner on Friday as well. We hope this gives Adrian an opportunity to be reunited with many of his alumni who benefited not only from his undoubted research excellence but also from his leadership and training to go on and be high achievers in the field of Optical Coherence Tomography and Photonics in general.

Adrian is a pioneering researcher who helped advance greatly the field of Optical Coherence Tomography (OCT). The University of Kent has benefited for many years from Adrian's dedication and enthusiasm and the world-leading quality of his research and its application.

Beyond the opportunity to honour Adrian and his long successful career, this event will also allow the current research students to attend high-quality presentations, present their current work and network with a swathe of high-calibre researchers that this has already attracted.

Since 2005, Adrian has led the Applied Optics Group in the University of Kent (and continues to do so), developing OCT both as a methodology and with applications across a wide range of fields from clinical practice to forensic sciences. He has supervised (and continues to do so) of more than 50 postgraduate and visiting researchers during his career at Kent, many of whom have gone on to lead in their fields. His work combining OCT, scanning laser ophthalmoscopy and adaptive optics for the retina has led to commercial collaborations to produce licensed products that are estimated to have benefited around 5 million patients worldwide. More recently he has pioneered a new processing paradigm for spectral domain optical coherence tomography which allows imaging with unprecedented speed, with direct clinical applications.

Adrian's prolific research efforts have made him the author with the highest number of publications across the University for the last 9 years running (according to SciVal) and he is also the UK author with the highest number of OCT outputs, as well as more than £15m in grants won (to date) during his career at Kent. Adrian was Lead Guest Editor of a special feature in Biomedical Optics Express, a leading gold open access journal of Optica, to celebrate 20 years from the invention of the OCT/SLO which firmly put the University of Kent on the map of vision and ophthalmic instruments research.

Adrian has also led a series of European funded training networks which bring academics and industry together in the training Early Career Researchers. These



training networks highlight his continued passion for training, mentoring, and developing the careers of young researchers, indeed some of his former students and younger collaborators have themselves established international research groups. The time and dedication with which he undertakes such training and mentoring are an example to the community.

On behalf of the organising committee,

Adrian Bradu
Julien Camard
Ramona Cernat
George Dobre
Michael Hughes
Manuel Marques
Alejandro Martínez-Jimenez

Important information

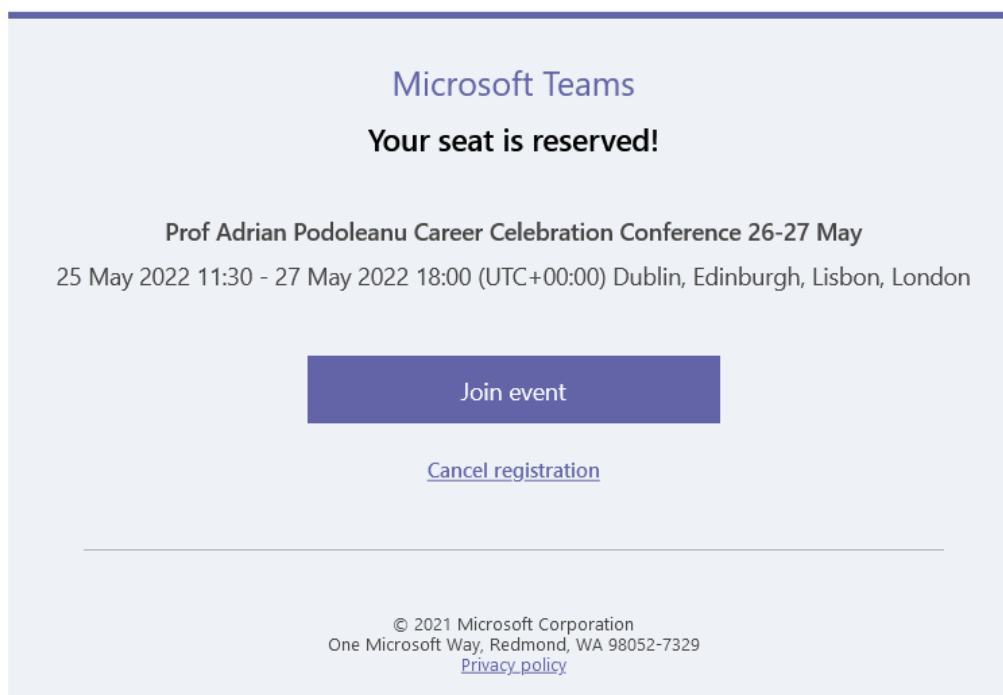
The talks, poster sessions, coffee breaks and lunches will be taking place in the **Sibson Building** (see map overleaf).

For participants joining us **virtually**: the full conference programme will be available via the following link:

https://teams.microsoft.com/registration/VvqpUTI_mkSnIT4_Sapemg.ec1lcxSBzUGihSeI1bbrag,sstEMIKfc0KRE4zCzs9JeQ,z9guXvoZpEaav4XcYYx2AQ,s3v4UF_vQ06JMXVexVoYoQ,wODno6dMiU-2e6a2a8ljgg?mode=read&tenantId=51a9fa56-3f32-449a-a721-3e3f49aa5e9a

We recommend using Microsoft Edge or Google Chrome if using the web version of Microsoft Teams.

Once registered, participants will get an email confirmation that looks like this, and they can join the event for practice from 25 May by clicking on the "Join event" button.



Visits to the Applied Optics Group labs will be taking place on Thursday afternoon; a sign-up sheet is available in the reception desk (in the Sibson Foyer). The AOG labs are located in the Photonics Centre, across the road from the Sibson building. The lab tours will be departing from Sibson Foyer.

A **guest book** is available to be signed by all event participants; if joining virtually, please feel free to leave a message on [this Google Docs link](#), and these will be added to the physical book after the event.

The **Thursday drinks reception** will also be taking place in the **Sibson Foyer**, after the lab tours are concluded.

The **Gala Dinner** is taking place at the **Darwin Conferences Suite**, in **Darwin College**.

Important phone numbers

- +44 7501 323646 (Manuel)
- +44 7866 934220 (George)
- +44 7760 471038 (Ramona)

In an emergency – dial 999.

We will have a photographer on-site taking pictures during the social events; **if you do not wish to be photographed, please make that clear when you register.**

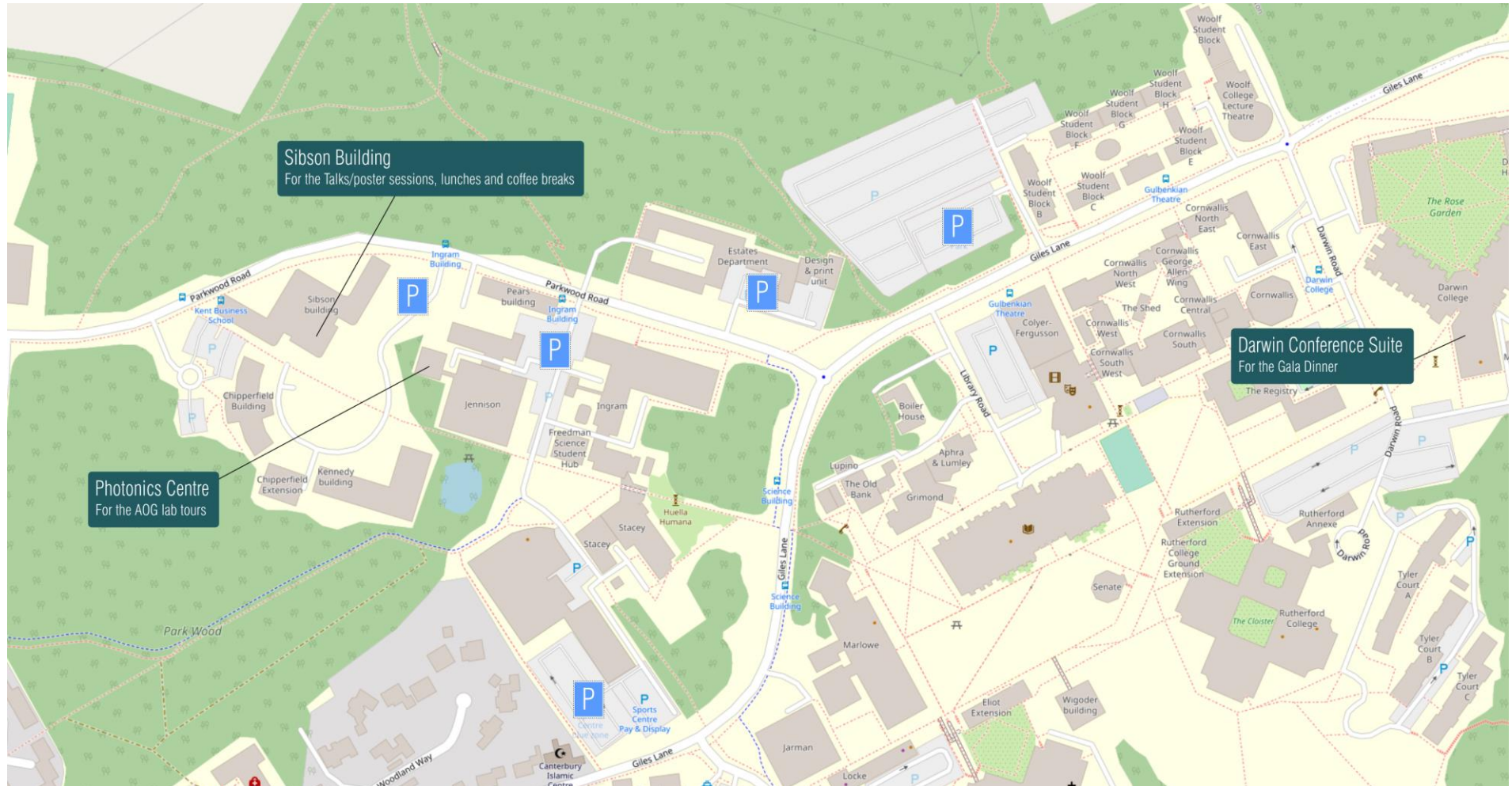
Instructions for presenters

We would prefer that presenters use the IT equipment already present in the lecture theatre (Windows 10 PC with Office and Adobe Reader), given that the presentations will be broadcast to all remote attendees via Microsoft Teams.

If that is not possible, and the speaker wishes to use their own device, that can be arranged – just let the chair of the session know in advance. Bear in mind that this option will not allow the best quality of broadcast to participants joining us remotely.

Presenters joining in virtually should follow the Teams link above 10 minutes before the session start and wait for any instructions from the session chair, which will be given via Teams.

Campus map



Event programme

	Thu 26 May	Fri 27 May
08:00		Registration
08:15		
08:30		Prof Robert Huber <i>Universität zu Lübeck, Germany</i>
08:45		
09:00		Prof Humberto Michinel <i>Universidad de Vigo, Spain</i>
09:15		Prof Nigel Mason <i>University of Kent, UK</i>
09:30		Dr Chao Wang <i>University of Kent, UK</i>
09:45		☕ Coffee break
10:00	Registration	Prof Christoph Hitzemberger <i>Medical University of Vienna, Austria</i>
10:15		
10:30		Prof Kirill Larin <i>University of Houston, USA</i>
10:45		Dr Carla Rosa <i>University of Porto, Portugal</i>
11:00		☕ Coffee break
11:15		Prof Stephen Matcher <i>University of Sheffield, UK</i>
11:30		
11:45		Prof Crina Cojocaru <i>Polytechnic University of Catalonia, Spain</i>
12:00	Lunch	Dr Jingyu Wang <i>University of Oxford, UK</i>
12:15		
12:30	Opening speeches	Lunch (& group photo)
12:45		
13:00	Prof Maciej Wojtkowski <i>Institute of Physical Chemistry, Polish Academy of Sciences, Poland</i>	Prof Meda Negruțiu <i>Victor Babeș University of Medicine and Pharmacy, Romania</i>
13:15		

13:30	Dr Radu-Florin Stancu <i>University of Kent, UK</i>	Prof Cosmin Sinescu <i>Victor Babeş University of Medicine and Pharmacy, Romania</i>
13:45	Dr Maria-Alexandra Păun <i>Swiss Federal Institute of Technology (Lausanne), Switzerland</i>	Prof Adrien Desjardins <i>University College London, UK</i>
14:00	Prof Fabrizio Frezza <i>Sapienza University of Rome, Italy</i>	Prof Aristide Dogariu <i>CREOL, The College of Optics and Photonics, USA</i> Natalie Tuchapsky/Dr Vladimir Shidlovski <i>Superlum Ireland</i>
14:15	☕ Coffee break (& group photo)	☕ Coffee break
14:30	Prof Richard Rosen <i>New York Eye and Ear Infirmary of Mount Sinai, USA</i>	Prof Ole Bang <i>Technical University of Denmark</i>
14:45	Dr Bettina Heise <i>Research Center for Non- Destructive Testing (Linz), Austria</i>	Prof Kamran Avanaki <i>University of Illinois Chicago, USA</i>
15:00	Prof Claudia Coțca <i>Washington Institute for Dentistry & Laser Surgery, USA</i>	Prof. Marinko Sarunic <i>Moorfields Eye Hospital / University College London, UK</i>
15:15	Dr Peter Munro <i>University College London, UK</i>	Prof Sherif Sherif <i>University of Manitoba, Canada</i>
15:30	☕ Coffee break	☕ Coffee break
15:45	Prof Jannick Rolland <i>University of Rochester, USA</i>	Prof Robert Zawadzki <i>University of California, Davis, USA</i>
16:00	Dr Andrew Thrapp <i>Wellman Center for Photomedicine, Harvard Medical School, USA</i>	Prof Irina Larina <i>Baylor College of Medicine, Houston, USA</i>
16:15	Dr Yong Hu <i>iCare, Italy</i>	Prof Gabriel Popescu <i>University of Illinois at Urbana- Champaign, USA</i>
16:30		Prof Mircea Guina <i>Tampere University, Finland</i>
16:45	Lab tours	Prof David Sampson <i>University of Surrey, UK</i>
17:00		
17:15		
17:30		



17:45		Closing speeches
18:00	Drinks / Networking/posters	
18:15		
18:30		
18:45		
19:00		Dinner
19:15		
19:30		
19:45		
20:00		

Keynotes and Contributed Talks

Session 1

Session chair: Dr Manuel Marques

- **What really is the fundamental limitation in OCT (*keynote talk*)**
Prof Maciej Wojtkowski, *Institute of Physical Chemistry, Polish Academy of Sciences*
- **Akinetic Swept Sources for Imaging and Research into modern Phased Array Antennae**
Dr Radu-Florin Stancu, *University of Kent*
- **Analysis and modelling of medical electronic devices.**
Dr Maria-Alexandra Păun, *Swiss Federal Institute of Technology (Lausanne)*
- **Deeply penetrating non-homogeneous waves in dissipative materials: theoretical principles, physical realizability conditions, application perspectives**
Prof Fabrizio Frezza, *Sapienza University of Rome*

Session 2

Session chair: Dr George Dobre

- **"Dancing with The Stars! Harnessing the Synergy of Dynamic OCT Angiography and Adaptive Optics SLO for Retinal Discovery" (*keynote talk*)**
Prof Richard Rosen, *New York Eye and Ear Infirmary of Mount Sinai*
- **Some remarks to OCT and beyond**
Dr Bettina Heise, *Research Center for Non-Destructive Testing (Linz)*
- **Strategic Function and Position of OCT Technology in Global Dentistry.**
Prof Claudia Coțca, *Washington Institute for Dentistry & Laser Surgery*
- **From OCT to Microscopy**
Dr Jingyu Wang, *University of Oxford*
- **Full wave modelling of image formation in optical coherence tomography**
Dr Peter Munro, *University College London*

Session 3

Session chair: Dr Adrian Bradu

- **Gabor-domain optical coherence microscopy first presented in Kent in 2008 - a journey** (*keynote talk*)
Prof Jannick Rolland, *University of Rochester*
- **Computational imaging with multicore fiber bundles**
Dr Andrew Thrapp, *Wellman Center for Photomedicine, Harvard Medical School*
- **Multiphoton Microscopy & OCT**
Dr Yong Hu, *iCare*

Session 4

Session chair: Dr Michael Hughes

- **The evolution of Fourier Domain Mode Locked (FDML) Lasers for Megahertz Optical Coherence Tomography (MHz-OCT)** (*keynote talk*)
Prof Robert Huber, *Universität zu Lübeck*
- **The international Commission for Optics: the place where the world of optics meets**
Dr Humberto Michinel, *Universidad de Vigo*
- **Adrian Podoleanu - Inspiring colleague and academic leader at University of Kent**
Prof Nigel Mason, *University of Kent*
- **Data-efficient ultrafast single-pixel imaging**
Dr Chao Wang, *University of Kent*

Session 5

Session chair: Dr Manuel Marques

- **From Ocular Biometry to Cellular Resolution- and Multifunctional OCT: Coherence Ranging and Imaging in the Human Eye over a Third of a Century** (*keynote talk*)
Prof Christoph Hitzenberger, *Medical University of Vienna*
- **Dynamic Optical Coherence Elastography**
Prof Kirill Larin, *University of Houston*
- **The Oporto Connection**
Dr Carla Rosa, *University of Porto*

Session 6

Session chair: Dr George Dobre

- **OCT development: a UK perspective** (*keynote talk*)
Prof Stephen Matcher, *University of Sheffield*
- **Nonlinear optics in non-phase match configurations: nanostructures and random non-linear crystals**
Prof Crina Cojocaru, *Polytechnic University of Catalonia*
- **From OCT to Microscopy**
Dr Jingyu Wang, *University of Oxford*

Session 7

Session chair: Dr Adrian Bradu

- **Oral soft tissue lesions assessed by optical coherence tomography** (*keynote talk*)
Prof Meda Negruțiu, *Victor Babeș University of Medicine and Pharmacy*
- **Direct restorations evaluation with optical coherence tomography**
Dr Cosmin Sinescu, *Victor Babeș University of Medicine and Pharmacy*
- **Interferometric fibre optic imaging to guide minimally invasive procedures**
Prof Adrien Desjardins, *University College London*
- **From CREOL to Kent and back** (*video presentation*)
Prof Aristide Dogariu, *CREOL, The College of Optics and Photonics*
- **Superlum and the AOG: past and present**
Natalie Tuchapsky/Dr Vladimir Shidlovski, *Superlum Ireland*

Session 8

Session chair: Dr George Dobre

- **Supercontinuum based OCT systems for near-IR and mid-IR applications** (*keynote talk*)
Prof Ole Bang, *Technical University of Denmark*
- **My Journey After I Left Canterbury**
Prof Kamran Avanaki, *University of Illinois Chicago*
- **En face retinal imaging and OCT Angiography**
Prof Marinko Sarunic, *Moorfields Eye Hospital / University College London*
- **Spectral Unmixing of Hyperspectral Imaging Data**
Prof Sherif Sherif, *University of Manitoba*

Session 9

Session chair: Dr Michael Hughes

- **Progress on functional retinal imaging with OCT** (*keynote talk*)
Prof Robert Zawadzki, *University of California, Davis*
- **Biophotonics of Embryonic Development**
Prof Irina Larina, *Baylor College of Medicine*
- **Standing on Adrian's shoulders: from OCT to QPI**
Prof Gabriel Popescu, *University of Illinois at Urbana-Champaign*
- **Laser technologies linking Tampere University and AOG.**
Prof Mircea Guina, *Tampere University*
- **Optical coherence tomography – reflections on common origins and paths crossed** (*keynote talk*)
Prof David Sampson, *University of Surrey*

Poster presentations

- **Time-lapse Optical Coherence Tomography Embryo Imaging with Minimal Disturbance**
Manuel J. Marques, *University of Kent*
- **High-Tunable Fabry–Pérot MEMS-filters and MEMS-VCSEL for OCT applications**
Irene Rodriguez Lamoso, *Technical University of Darmstadt* (NETLAS Ph.D. student)
- **Depth Encoded Polarization Sensitive OCT**
Rasmus Eilkær Hansen, *Technical University of Denmark (DTU)*
- **Dispersion tuned akinetic swept source**
Rene Riha, *University of Kent* (NETLAS Ph.D. student)
- **Endoscopic full-field imaging and optical coherence tomography through a fibre bundle**
Hal Dorrington, *University of Kent* (AOG Ph.D. student)
- **Development of 850 nm Galvo Scanner based Swept Source for Full Field OCT**
Gopika Venugopal, *University of Kent* (NETLAS Ph.D. student)
- **Fast Akinetic Swept Source for Optical Coherence Tomography**
Sacha Grelet, *NKT Photonics* (NETLAS Ph.D. student)
- **840nm FDML Laser**
Marie Klufts, *Institute of Biomedical Optics, Universität zu Lübeck* (NETLAS Ph.D. student)
- **High-resolution non-invasive assessment of oocytes and early-stage embryos with Optical Coherence Tomography**
Julien Camard, *University of Kent* (AOG Ph.D. student)
- **Time stretch laser technology for OCT**
Alejandro Martínez Jiménez, *University of Kent* (NETLAS Ph.D. student)
- **Electrically Pumped MEMS VCSEL for OCT**
Esteban Andres Proano Grijalva, *Technical University of Denmark (DTU)* (NETLAS Ph.D. student)
- **Non-destructive Identification Document Inspection with Swept-source Optical Coherence Tomography (OCT) Imaging**
Manuel J. Marques, *University of Kent*
- **Membrane external-cavity surface-emitting lasers (MECSELs): A light source for vis-OCT**
Philipp Tatar-Mathes, *Tampere University* (NETLAS Ph.D. student)