

Launch of the Imperial Space Lab



Professor Steve Schwartz

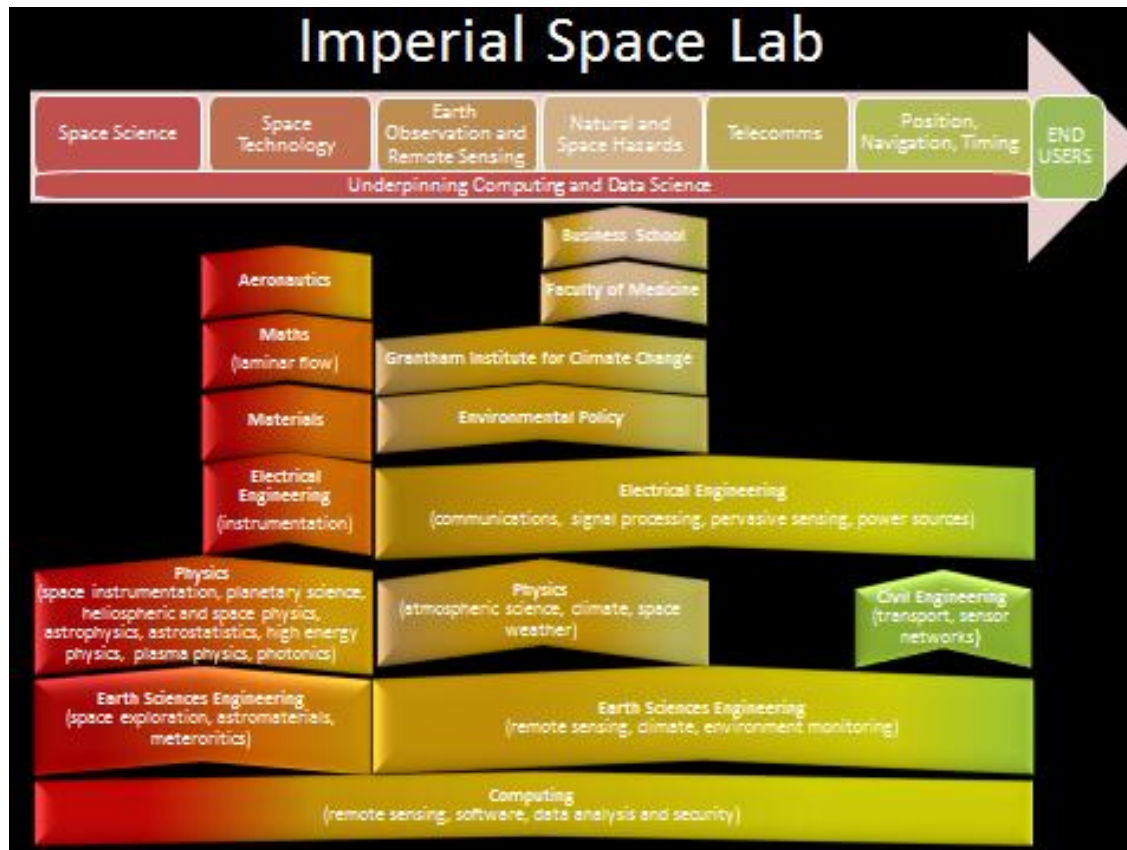
Chair in Space Physics and Director, Imperial Space Lab

1 July 2013

Imperial Space Lab www3.imperial.ac.uk/spacelab

Director: Professor Steve Schwartz

- Multidisciplinary research network that facilitates collaboration across Imperial and with external academic and industry partners
- Aims to promote innovative partnerships with the space industry and communicate our research
- ~80 researchers from Faculties of Engineering, Natural Sciences, Medicine and Business School across seven major themes:

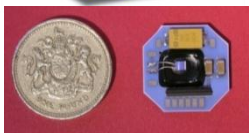
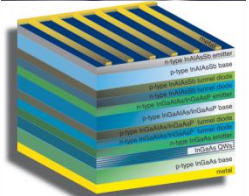
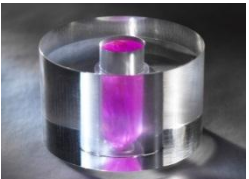
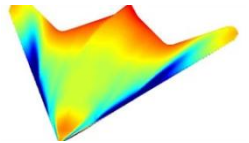


Space research at Imperial

Research covers upstream (space technology providers) and downstream (space technology users) sectors;

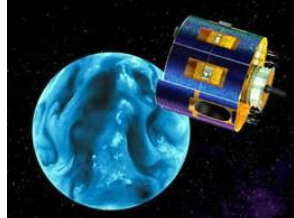
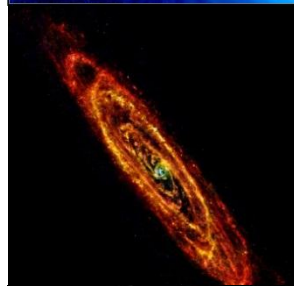
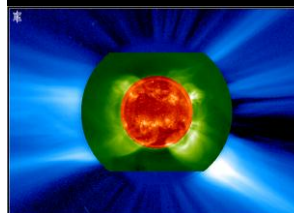
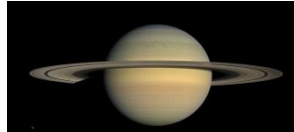
Ranges from blue-skies research in planetary sciences to applications such as navigation and positioning solutions

Technology



- Aerial robotics- jumpgliding microrobots
- Aeronautics and mathematics: laminar flow control
- Computing-Software: autonomous sensing for telecommunications, timing, data processing
- Materials- MASER, low noise amplifiers for space & terrestrial comms
- Solar energy
- Space weather monitoring constellation

Science



- Planetary Science
- Heliospheric & Space Physics
- Astronomy & Astrophysics
- Astrostatistics
- Earth Observation

See the posters for more information!

Imperial Space Lab www3.imperial.ac.uk/spacelab

Director: Professor Steve Schwartz

For more information on our research visit www3.imperial.ac.uk/spacelab

The screenshot shows the Imperial Space Lab website homepage. At the top, there is a navigation bar with links for Prospective Students, Students, Alumni, Staff, Business, and Media, along with a search box and a 'People' link. Below this is the main header 'Imperial Space Lab' with a secondary navigation menu: Home, About us, Research, Funding, News and events, and Contact us.

The main content area features a large green box on the left with the text: 'Space Lab. A multidisciplinary research network that facilitates collaboration, creativity and idea generation across Imperial and with external partners.' To the right of this box is a large image of a satellite in orbit around Earth.

Below the green box is a welcome message: 'Welcome to the Imperial Space Lab, a multidisciplinary research network that facilitates collaboration and idea generation across Imperial, and with external academic and industry partners. The Imperial Space Lab aims to strengthen funding applications, communicate Imperial's research and promote innovative partnerships with the space industry.'

The 'Themes' section states: 'The Imperial Space Lab research activities are structured within seven major themes each with sub themes as outlined below.'

The seven themes are:

- Space Science**
 - Planetary Science
 - Heliospheric and Space Physics
 - Astronomy and Astrophysics
 - Astrostatistics
- Space Technology**
 - Sensors
 - Satellite sub-systems
 - Calibration facilities
 - Satellite deployables
 - Mission design, covering launch, space, ground and operations segments
 - Instrument operations
 - Spacecraft design
 - Robotics
 - Materials
- Earth Observation and Remote Sensing**
 - Sensor design
 - Sensor calibration
 - Instrument operations
 - Exploring processes in the earth system
- Telecommunications**
 - Communications and Signal
- Natural and Space Hazards**
 - Space weather
- Positioning, Navigation, Timing**

On the right side of the page, there is a sidebar with a 'Space videos' section. It lists three videos:

- Mission to Mars**: Dr Simon Foster on how he and other Imperial researchers are plotting to send astronauts to Mars.
- Mission to Mars**: Dr Simon Foster on how he and other Imperial researchers are plotting to send astronauts to Mars. (Extract 4 of 4 from the Imperial College Podcast 19 June 2013)
- Heavenly turbulence**: Physicist Professor Tim Horbury explains the science behind space plasmas and why understanding turbulence is so important.

A 'View more' link is located at the bottom of the sidebar.

Why work with Imperial's space researchers?

- Gain exposure to world-leading research
- Utilise educational and training excellence
- Connect to expertise in translation and knowledge transfer
- Collaborate with world-renowned academics
- Access a global pool of talented students
- Join a network of partners and public funding bodies
- Grasp the opportunity to influence on a global scale



How we can work together:

Through people and training:

- Access to student pool through industry sponsored studentships and internships
- Industry sponsored fellowships, including through Imperial's Junior Research Fellowship programme
- Short or long term secondments
- Courses: Continuing Professional Development, Master's courses and tailored programmes
- Consultancy services-Imperial Consultants
- Access to facilities and associated expertise

Through project funding:

- Direct funding for single projects
- Large, strategic partnerships
- Spinouts and venture capitalist funding
- Commercialisation and technology transfer activities
- Leveraged and matched funding for research



Launch of the Imperial Space Lab

1 July 2013 9:30-6pm

Lecture theatre G34, Sir Alexander Fleming Building, Imperial College London,
South Kensington campus (building 33 on [map](#))

The aim of the event is to launch the Imperial Space Lab, a new multidisciplinary research network that facilitates collaboration and idea generation across Imperial, and with external academic and industry partners. The Imperial Space Lab aims to communicate Imperial's research, strengthen funding applications and promote innovative partnerships with the space industry.

Programme:

9:30 Registration with refreshments

10:00 Welcome and Introduction to Imperial; Professor Sir Keith O'Nions, President and Rector, Imperial College London

Session 1: Space Science

10:15 UK Space Agency; Dr David Parker, Chief Executive

10:40 Space Missions to the Outer Planets; Professor Michele Dougherty, Imperial

11:05 Imperial's involvement in NASA's next Mars mission, InSight; Dr Tom Pike, Imperial

11:30 Earth Observation Activities at Imperial; Dr Helen Brindley, Imperial

11:55 European Space Agency; Magali Vaissiere, Director of Telecommunications and Integrated Applications

12:20 LUNCH and poster session

Session 2: Space Technology

13:20 Space Physics: Instrumentation and Industrial Partnerships; Chris Carr, Imperial

13:45 Satellite Applications Catapult; Paul Febvre, CTO

14:10 Geochemistry and Meteoritics, Professor Mark Sephton; Imperial

14:35 SSTL; Phil Davies, European Business Development Manager

15:00 EADS Astrium; Chris Ward, Head of UK R&D

15:25 BREAK and poster session

Session 3: Space Services and Funding Opportunities

16:00 STFC External Innovations Programme Funding Schemes; Dr Vlad Skarda

16:25 Telespazio VEGA UK; John Bone, Business Development Director

16:50 Inmarsat; Ruy Pinto, CTO

17:15 Close; Professor Maggie Dallman, Dean, Faculty of Natural Sciences, Imperial

17:30 Reception

To register and for more information please visit <http://imperialspaceresearch.eventbrite.com/> or view the Imperial College London [events](#) page

All talks are 20 minutes long + 5 minutes questions

Thank you

Imperial College
London



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