

Workshop on “Laser Diodes for Space Applications”

Location: III-V Lab, Campus Polytechnique 1, Avenue Augustin Fresnel, F-91767
Palaiseau Cedex, France.

Date: 23-24 November 2015

IMPORTANT DATES

- **July 1st:** First announcement and call for contributions
- **August 3rd:** Second announcement and second call for contributions
- **September 11th:** Deadline for contributions
- **September 21th:** Third announcement and provisional program
- **October 5th:** Registration opens
- **November 2nd:** Fourth announcement and final program
- **November 23-24th:** Workshop on Laser Diodes for Space Applications

The FP7-Space Project *BRITESPACE* in collaboration with ESA is pleased to announce the international Workshop on “Laser Diodes for Space Applications”, devoted to promote the contact between developers and manufacturers of laser diodes with developers and users of space systems.

The aim is to promote the interaction between communities of laser diodes manufacturers and space systems developers and users in both research and industry environments. In particular, this workshop will focus on the needs of appropriate laser diodes sources and configurations required by specific space applications.

Scope:

- Design, development and manufacturing of pulsed and CW laser diodes and semiconductor amplifiers: Broad Area Laser Diodes, DFB, DBR, VCSEL, VECSEL, Diodes Arrays, Bars and Stacks, Master Oscillator Power Amplifier (MOPA), Photonic Crystals.
- Space applications of laser diodes: Free Space Communications, Pump Modules, Intra Satellite Communications, Microwave Photonics, Navigation Sensors, Clocks, Planetary Exploration and Monitoring: LIDAR, Spectrometers.
- Reliability of laser diodes in space environment: Thermal, Vacuum/Contamination, Radiation, Vibration. Space qualification, performance testing and characterization of laser diodes.

Programme

The programme will include both invited and contributed presentations. Remote attendance will be also available through conference web services.



Invited Speakers

1. Massimo Vanzi, University of Cagliari (Italy). *Failure physics of laser diodes. Historical issues and recent updates.*
2. Jorge Piris, ESTEC, ESA (The Netherlands). *Testing and evaluation of laser diodes for space applications at ESTEC. **To be confirmed.***
3. Olivier Gilard, CNES (France). *Space qualification strategy for laser diodes.*
4. Andreas Kohl, Quantel (Germany). *Evolution and perspectives of QCW high power diodes for space applications.*
5. Lip Sun How, Advteotec (France). *Laser diode reliability testing for Space applications.*
6. Jens Tomm, Max-Born Institut,(Germany), *Sudden degradation of AlGaAs-based high-power diode lasers: Analysis of bulk and facet failures.*
7. Hanno Scheife, TESAT Spacecom (Germany). Title TBA
8. Gerald Schmitt, Jenoptik (Germany). Title TBA
9. Juan Barbero, Alter Technology Group (Spain). *Testing of laser diodes for space applications at ALTER.*
10. Frédéric van Dijk, III-V lab (France). *Semiconductor laser development for space applications at III-V lab.*
11. Ignacio Esquivias, Universidad Politécnica de Madrid (Spain), *High-brightness multi-section semiconductor laser for space-borne lidar measurements of atmospheric carbon dioxide.*
12. Martin Traub, Fraunhofer-Institut für Lasertechnik (Germany), title TBA

Contributed presentations

Contributed presentations in any of the above topics will be welcome. Please send presentation title, author list, short abstract (1 page max. in doc format) and speaker personal data before September 11th to:

laserdiode_space_workshop@cemdatic.upm.es

Technical Committee

Ignacio Esquivias, Universidad Politécnica de Madrid, Spain

Michel Krakowski, III-V Lab, France

Martin Traub, Fraunhofer-Institut für Lasertechnik, Germany

Juan Barbero, Alter Technology Group, Spain

John G. Rarity, University of Bristol, United Kingdom

Gerhard Ehret, Deutsches Zentrum für Luft- und Raumfahrt, Germany

Mustapha Zahir, ESTEC, ESA, The Netherlands

Contact: laserdiode_space_workshop@cemdatic.upm.es

Information: www.britespace.eu

