## Confirmed Posters

Further poster presentations are welcome, please contact T. Kleine-Ostmann

| P01 | Development of microbolometer detectors | P. Lobotka, SMU |
| P02 | Absolute intensity measurements of cw GHz and THz radiation using electro-optic sampling | M. Bieler, PTB |
| P03 | Optimum setup and uncertainty analysis of FT-IR spectrometers | A. Steiger, PTB |
| P04 | THz TD Spectrometer at INRIM | L. Oberto, INRIM |
| P05 | Round-robin test and comparison of spectrometers | L. Oberto, INRIM |
| P06 | The Horn Antenna as Gaussian-Source in the mm-Wave Domain | A. Kazemipour et al., PTB |
| P07 | Development of Skin Phantoms | D. Allal, LNE |
| P08 | Skin model verification with thermal imaging | A. Kazemipour et al., PTB |
| P09 | Towards Compressed Sensing for THz-Bodyscanners (REG1) | S. Augustin et al., TUB |
| P10 | Beam and emission properties of a terahertz emitting vertical-external-cavity surface-emitting laser (TECSEL) (REG2) | G. Urbasch et al., UMR |
| P11 | Characterization of metallic waveguides using guided-wave time-domain THz spectroscopy (REG3) | J. Mangeney et al., CNRS |
| P12 | Investigation of the beam quality of terahertz sources (REG4) | G. Urbasch et al., UMR |
| P13 | Method for material parameters extraction from the measured s-parameters at frequencies up to 500 GHz (RMG1) | M. Hudlicka et al., CMI |
| P14 | Influence of Delay line Uncertainties on THz TDS Measurements (RMG2 and RMG3) | D. Jahn, S. Lippert, UMR |
THz Security Workshop

The Joint Research Project “Microwave and Terahertz Metrology for Homeland Security” (THz Security) is funded within the European Metrology Research Programme (EMRP). The project aimed to develop metrological traceability of sources and detectors in the sub-mm and THz frequency bands, which is a prerequisite for the traceability of THz systems such as spectrometers, security scanners and imaging systems.

The workshop “THz Security – Microwave and terahertz metrology for homeland security” hosted by PMOD/WRC and PTB aims to bring together experts from academia and industry with the scientists from the consortium. Goal is to present and discuss the scientific results from the research project and to make it available to a wider public.

Venue
Physikalisch-Meteorologisches Observatorium Davos (PMOD) / World Radiation Center (WRC)
Dorfstrasse 33, 7260 Davos Dorf, Switzerland
Directions and further information http://www.pmodwrc.ch/

Hotels
Within walking distance are the hotels
Seehof**** seehofdavos.ch
Victoria**** victoria-davos.ch
Parsenn*** hotelparsenn.ch
Meierhof**** meierhof.ch
Further hotels available at www.davos.ch

Registration
until May 15, 2015
there is no workshop fee

Programme
Friday, 29 May 2015, 9:00 – 17:00

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<td>Welcome Reception</td>
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| 09:00 | Introduction to the project: THz Security – Microwave and terahertz metrology for homeland security  
T. Kleine-Ostmann | THz Frequency Combs  
M. Bieler, PTB | Chair: O. Bottauscio, INRIM |
| 09:20 | Novel detectors for traceable THz power measurements  
W. Bohmeyer, SLT | Design and Calibration of a Compact Quasi-Optical System for Material Characterization in Millimeter/Submillimeter Wave Domain  
A. Kazemipour, PTB |
| 09:40 | Portable room-temperature THz radiometer  
W. Finsterle, PMOD | Reference Materials for Spectrometer Verification  
D. Allal, LNE |
| 10:00 | Traceable terahertz power measurement from 1 THz to 5 THz  
A. Steiger, PTB | Terahertz Spectrometer for Mail Inspection  
J. Jonuscheit, Fraunhofer IPM |
| 10:20 | Carbon Nanotube Based Detectors for THz Radiometry  
J. Lehman, NIST | Emission of mm-Wave and THz Scanners  
T. Kleine-Ostmann, PTB |
| 10:40 | Coffee Break | Modelling heat transfer into human skin exposed to millimeter electromagnetic radiations  
L. Zilberti, INRIM |
| 11:00 | Coffee Break | New Radar Applications in the THz Frequency Range  
N. Pohl, Fraunhofer FHR |
| 11:40 | THz Spectrometers  
Chair: M. Bieler | Coffee Break |
| 11:20 | Design and Calibration of a Compact Quasi-Optical System for Material Characterization in Millimeter/Submillimeter Wave Domain  
A. Kazemipour, PTB |
| 12:00 | Reference Materials for Spectrometer Verification  
D. Allal, LNE | Lab Tour PMOD/WRC  
W. Finsterle |
| 12:20 | Terahertz Spectrometer for Mail Inspection  
J. Jonuscheit, Fraunhofer IPM | End of Day |
| 13:00 | Poster Session after Lunch Break | |

Partners