

## The yearly meeting of the Biomedical Photonics Network 2017

### Progress in Biomedical Photonics

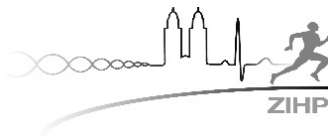
at the University Bern, Kuppelsaal, Hochschulstrasse 4  
December 11, 2017 from 9:45 to 16:15

#### Program

- 09:45-10:15 Registration, posters, coffee and croissants
- 10:15-10:30 Welcome and introduction of the BMPN  
Martin Wolf, President BMPN
- 10:30-10:45 Video-based heart rate monitoring in neonatal intensive care unit  
Sibylle Fallet, V. Moser, D. Ostojic, T. Karen, F. Braun, J-M. Vesin.  
EPFL, Lausanne, University of Zurich, CSEM Neuchâtel.
- 10:45-11:00 Respiration monitoring in the neonatal intensive care unit via a video camera: Preliminary results  
Fabian Braun, A. Lemkaddem, V. Moser, D. Ostojic, T. Karen, O. Grossenbacher, M. Bertschi. CSEM, Neuchâtel, University of Zurich, EPFL, Lausanne.
- 11:00-11:15 *In-vivo* SO<sub>2</sub> level imaging of arteries and veins in a human forearm using optoacoustic multiple-irradiation-sensing  
Gerrit Held, L. Ulrich, M. Jaeger, J. Rička, M. Frenz, H. G. Akarçay.  
University of Bern.
- 11:15-11:30 Dosimetry control and monitoring of selective retina therapy using optical coherence tomography  
Daniel Kaufmann, Christian Burri, P. Arnold, V. M. Koch, C. Meier, B. Považay, J. Justiz. Bern University of Applied Sciences, Biel.
- 11:30-11:45 A high-speed time-resolved image sensor for near-infrared optical tomography: challenges and opportunities  
Scott Lindner, C. Zhang, I. M. Antolovic, A. Kalyanov, J. Jiang, L. Ahnen, A. di Costanzo, J. Mata Pavia, S. Sanchez Majos, M. Wolf, E. Charbon.  
University of Zurich; EPFL, Lausanne.
- 11:45-12:00 Time domain near-infrared optical tomography with time-of-flight SPAD camera: the new generation  
Alexander Kalyanov, J. Jiang, A. Di Costanzo Mata, S. Lindner, L. Ahnen, S. Sánchez Majos, M. Wolf. University of Zurich.
- 12:00-12:15 Changes in optical properties of human head tissue during functional near-Infrared neuroimaging  
Hamoon Zohdi, F. Scholkmann, N. Nasser, U. Wolf. University of Bern.
- 12:15-12:30 On probing tissue with polarized light  
M. Hornung, A. Jain, M. Frenz, H. Günhan Akarçay, University of Bern

- 12:30-14:30 Lunch and poster viewing
- 14:30-15:15 Investigating the thermal properties of the human skin for the development of new diagnostic methods in dermatology  
Mathias Bonmarin, Zurich University of Applied Sciences (ZHAW)
- 15:15-16:00 SPAD Imagers: a Swiss-Army-knife for Biomedical Imaging  
Edoardo Charbon, EPFL
- 16:00-16:15 Award ceremony and closing

We gratefully acknowledge financial support:



**Registration is mandatory**

Please register through [bmpn2017.weebly.com](http://bmpn2017.weebly.com) at the latest by November 30, 2017; for further information: [www.bmpn.ch](http://www.bmpn.ch). The meeting is free of charge for members of BMPN, SSOM, ZIHP and EXCITE. Registration fee at the meeting CHF 50.- or apply for SSOM membership (CHF 30.-).

**Contacts**

For scientific & technical questions: Prof. Martin Wolf (Martin.Wolf@usz.ch)  
 For questions regarding organization & catering: Tanja da Cunha (Tanja.daCunha@usz.ch)

**Venue**

The meeting takes place at the University of Bern, Kuppelsaal, Hochschulstrasse 4, Bern.  
 Approx. 5 min. walking distance from the main station (an elevator connects the main station with the place in front of the building)

