

ISUPT 2009 Technical Program

August 4 (Tue.)	
9:00-9:10	Opening Remarks Masataka Nakazawa (Tohoku Univ., Japan) Welcome Address Masafumi Yano (Director of RIEC, Tohoku Univ.)
Session 1	Time and Frequency Control (Presider: Kaoru Minoshima, AIST, Japan)
9:10-9:40	Erich P. Ippen (MIT, USA) “Femtosecond technology for clocks and optical arbitrary waveforms”
9:40-10:10	S. J. Ben Yoo (Univ. of California at Davis, USA) “High-precision optical arbitrary waveform generation using integrated photonics”
10:10-10:40	Scott A. Diddams (NIST, USA) “Femtosecond optical frequency combs and their applications in precision time and frequency metrology”
10:40-11:10	Kenji Torizuka (AIST, Japan) “Attosecond timing and phase synchronization among multicolor laser pulses”
11:10-11:40	Peter A. Andrekson (Chalmers Univ. of Technology, Sweden) “All-optical sampling techniques for high-fidelity capture of optical waveforms”
11:40-12:00	Exhibition and Coffee Break
Session 2	Light Sources and Modulators (Presider: Junichiro Ichikawa, Sumitomo Osaka Cement, Japan)
12:00-12:30	Andrius Marcinkevicius (IMRA America Inc., USA) “Status and prospects of compact high field laser technology”
12:30-13:00	David J. Richardson (Univ. of Southampton, UK) “Advances in high power pulsed fibre lasers and their applications”
13:00-13:30	Tetsuya Kawanishi (NICT, Japan) “High-speed and precise control of lightwave using Mach-Zehnder interferometer modulators”
13:30-14:00	Kazuhiro Tanaka (Fujitsu Ltd., Japan) “Integrated optical modulators for high-speed multi-level modulation format”
14:00-20:30	Lunch and Excursion

August 5 (Wed.)	
Session 3	Optical Transmission (1) (Presider: Itsuro Morita, KDDI, Japan)
9:00-9:30	Masataka Nakazawa (Tohoku Univ., Japan) “Recent progress on ultrahigh-speed transmission and multi-level coherent transmission”
9:30-10:00	Reinhold Ludwig (Heinrich-Hertz Inst., Germany) “Ultrafast transmission systems using coherent technology”
10:00-10:30	Michael Galili (Technical Univ. of Denmark, Denmark) “Towards terabit per second serial communication systems”
10:30-10:50	Exhibition and Coffee Break
Session 4	Optical Transmission (2) (Presider: Shigeki Watanabe, Fujitsu Labs, Japan)
10:50-11:20	Peter J. Winzer (Alcatel-Lucent, USA) “Scalability aspects of high capacity optical transport networks”
11:20-11:50	Takashi Mizuochi (Mitsubishi Electric Corp., Japan) “Recent progress in forward error correction for 100 Gbps optical communications”
11:50-12:20	Yukio Horiuchi (KDDI, Japan) “High capacity wide-area optical access network technologies”
12:20-13:30	Lunch
Session 5	Signal Processing and Routers (1) (Presider: Koji Yamada, NTT, Japan)
13:30-14:00	Alexander L. Gaeta (Cornell Univ., USA) “Ultrafast all-optical processing on a silicon chip”
14:00-14:30	Shigeru Nakamura (NEC, Japan) “Functional integration of ultra-small optical multiplexer/demultiplexer and optical switch using silicon photonics”
14:30-15:00	Juerg Leuthold (Univ. of Karlsruhe, Germany) “Silicon organic hybrid - a new platform for high-speed photonic communications components”
15:00-15:30	Stojan Radic (Univ. of California San Diego, USA) “Scalable parametric processing of ultrafast optical signals”
15:30-15:50	Exhibition and Coffee Break
Session 6	Signal Processing and Routers (2) (Presider: Tetsuya Miyazaki, NICT, Japan)
15:50-16:20	Harmen J. Dorren (Eindhoven Univ. of Technology, Netherlands) “Optical signal processing and optical packet switching at high bit-rates”
16:20-16:50	Katsuya Ikezawa (Yokogawa Electric Corp., Japan) “Developments of core technologies for ultra-fast optical routers with compound semiconductor technologies”
16:50-17:20	Ryohei Urata (NTT, Japan) “Optical and optoelectronic technologies for a photonic router”
17:20-17:30	Closing Remarks Yuichi Matsushima (NICT, Japan)