

# CONFERENCE PROGRAM

**September 7, 2016 (Wednesday)**

08:00 - 08:50	Symposium Registration
08:50 - 09:00	Symposium Opening Remark
<b><i>Quantum Cascade Lasers (Chair: Martin Virte) P.8~P.15</i></b>	
09:00 - 09:30	<b>F. Grillot</b> (Invited) Chaotic dynamic of quantum cascade lasers
09:30 - 10:00	<b>M.I. Amanti</b> (Invited) High frequency modulation of quantum cascade lasers
10:00 - 10:15	<b>T.C. Newell, L. Jumpertz, M. Carras, F. Grillot, C. Lu, R. Kaspi</b> Investigation of a broad-area quantum cascade laser with external cavity feedback
10:15 - 10:30	<b>S. Ferré, L. Jumpertz, M. Carras, F. Grillot</b> Mode control and pattern stabilization in broad area quantum cascade laser by optical feedback
10:30 - 11:00	Coffee Break
<b><i>Quantum Dot Lasers (Chair: Sze-Chun Chan) P.16~P.21</i></b>	
11:00 - 11:30	<b>B. Lingnau</b> (Invited) Ultrafast carrier dynamics in submonolayer quantum-dots
11:30 - 11:45	<b>R. Pawlus, S. Breuer, M. Virte</b> Relative intensity noise reduction in a two-color quantum-dot laser by optical feedback control
11:45 - 12:00	<b>C. Wang, J.P. Zhuang, F. Grillot, S.C. Chan</b> Linewidth broadening factor in quantum dot lasers extracted by optical noise analysis
12:00 - 13:30	Lunch (Smile café at 1 <sup>st</sup> floor of the MXIC building)
<b><i>Optical Feedback and Its Application (Chair: Miguel Cornelles Soriano) P.22~P.27</i></b>	
13:30 - 14:00	<b>A. Uchida</b> (Invited) Reservoir computing with consistency of a semiconductor laser: chaos mask effect
14:00 - 14:30	<b>D. Rontani</b> (Invited) Exploration of the dynamical complexity of chaotic laser diode with optical feedback
14:30 - 14:45	<b>M.J. Wishon, A. Locquet, C.Y. Chang, A. Martinez, D. S. Citrin</b> Confirmation of reservoir properties
14:45 - 15:00	Mini Break
<b><i>Nano and Pulsed Lasers (Chair: Carlos L. Pando Lambruschini) P.28~P.33</i></b>	
15:00 - 15:30	<b>T. C. Lu</b> (Invited) Robust and ultracompact surface plasmon polariton nanolasers
15:30 - 15:45	<b>C.H. Cheng, G.R. Lin</b> Passively mode-locked fiber laser with silicon carbide saturable absorber
15:45 - 16:00	<b>T.T. Yeh, H. Shirai, C.M. Tu, T. Fuji, C.W. Luo, T. Kobayashi</b> Ultrabroadband mid-infrared pulse generation and pump-probe spectroscopy system
16:00 - 16:30	Coffee Break
<b><i>Laser Dynamics and Its Applications (Chair: Atsushi Uchida) P.34~P.41</i></b>	
16:30 - 17:00	<b>C.C. Lin</b> (Invited) Tunable microwave generation by integrated distributed feedback lasers
17:00 - 17:30	<b>S. Chang</b> (Invited) Mechanism of spiking in laser dynamics from the perspective of chaotic wave theory of fractal continuum (CWTOFC)
17:30 - 17:45	<b>C.Y. Chang, D. Choi, A. Locquet, M. J. Wishon, K. Merghem, A. Radane, F. Lelarge, A. Martinez, D. S. Citrin</b> Analysis voltage measurement on external cavity laser
17:45 - 18:00	<b>B. Wang, T. Zhao, A. Wang, Y. Wang</b> Precise fault location in passive optical network by utilizing chaotic laser
18:30 - 20:30	Welcome Reception (Smile café at 1 <sup>st</sup> floor of the MXIC building)

<b>September 8, 2016 (Thursday)</b>	
08:30 - 09:00	Symposium Registration
<b><i>Chaos and Its applications (Chair: Damien Rontani) P.42~P.53</i></b>	
09:00 - 09:30	<b>M. Virte</b> (Invited) Could birefringence be the key to generate chaos in free-running VCSELs?
09:30 - 10:00	<b>Y. Wang</b> (Invited) Generation and applications of chaotic laser in Taiyuan University of Technology
10:00 - 10:15	<b>Pu Li, Y. Sun, Y. Wang</b> Experimental demonstration of fully photonics-based random number generator by sampling laser chaos in the optical domain
10:15 - 10:30	<b>A. Wang, L. Wang, Y. Wang</b> Physical random number generation using optical heterodyne of chaotic lasers
10:30 - 10:45	<b>C.P. Chiu, X.W. Jiang, K.C. Chang, M.D. Wei</b> Chaos in an azimuthal polarized Nd:YVO4 laser with pump modulation
10:45 - 11:00	<b>C.H. Cheng, Y.C. Chen, F.Y. Lin</b> Generation of uncorrelated multi-channel chaos by electrical heterodyning for MIMO chaos radar
11:00 - 18:00	Local Tour (Set off: 11:00AM in front of the Venue near the Big Lawn)
18:30 - 20:30	Symposium Banquet (Sheraton Hsinchu hotel 4F "YUE" 新竹喜來登飯店 4F 采悅軒)
<b>September 9, 2016 (Friday)</b>	
08:30 - 09:00	Symposium Registration
<b><i>Optical Injection and Optical Feedback (Chair: Benjamin Lingnau) P.54~P.63</i></b>	
09:00 - 09:30	<b>S.C. Chan</b> (Invited) Dispersive feedback for time-delay information concealment in chaotic semiconductor lasers
09:30 - 09:45	<b>Y.H. Hung, S.K. Hwang</b> Semiconductor lasers at period-one nonlinear dynamics for photonic microwave mixing in radio-over-fiber links
09:45 - 10:00	<b>K.L. Hsieh, S.K. Hwang</b> Nonlinear dynamics of semiconductor lasers for photonic microwave time delays
10:00 - 10:15	<b>K.H. Lo, S.K. Hwang</b> Photonic microwave generation using optically injected semiconductor lasers subject to optical feedback
10:15 - 10:30	<b>L.C. Lin, S.H. Liu, F.Y. Lin</b> Comparison of the linewidth of photonic microwave signals generated by semiconductor lasers subject to optical injection and optical feedback
10:30 - 11:00	Coffee Break
<b><i>Mutual Injection and Coupled Lasers (Chair: Frederic Grillot) P.64~P.69</i></b>	
11:00 - 11:30	<b>C.L. Pando Lambruschini</b> (Invited) Phase locked Q-switched pulses, synchrony, and rare events in coupled lasers
11:30 - 12:00	<b>M.C. Soriano</b> (Invited) Dynamics and applications of delay-coupled semiconductor lasers
12:00 - 12:15	<b>D. Lenstra</b> Self-consistent rate-equation theory of coupling in mutually injected semiconductor lasers
12:15 - 12:30	Concluding Remark

## Organized by



## Supporting Organizations

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## VENUE

The IS-PALD 2016 will be held in Macronix (MXIC) building (Learning Resource Center) at National Tsing Hua University, Hsinchu, Taiwan.



### *Address :*

101, Sec. 2, Kuan-Fu Road, Hsinchu, Taiwan 300. (新竹市光復路二段 101 號 國立清華大學 學習資源中心 旺宏館)

### *Directions :*

**From the main gate of NTHU to Macronix Building (Learning Resource Center)**

After entering the main gate of National Tsing Hua University, the MXIC building (Learning Resource Center) will be on your right across the big lawn.

