

The Annual Conference of the  
IEEE Photonics Society

# IPC

## FINAL PROGRAM

29 September – 3 October 2019  
Hilton Palacio Del Rio  
San Antonio, USA

[www.ieee-ipc.org](http://www.ieee-ipc.org)

**General Co-Chair:**  
**Nikola Alic**, University of California, San Diego

**General Co-Chair:**  
**Carmen Menoni**, Colorado State University



WF3

**13:30 - 15:00 Highly Resonant Photonics**

**La Vista C**

Moderation: C.-Z. Ning, Tbd/US

**13:30 - 14:00 WF3.1 - INTEGRATED QUANTUM PHOTONIC CIRCUITS WITH QUANTUM DOTS**

S. Aghaemeibodi<sup>1</sup>, C.-M. Lee<sup>2</sup>, M. Buyukkaya<sup>2</sup>, A. Karasahin<sup>2</sup>, J.-H. Kim<sup>3</sup>, C. Richardson<sup>2</sup>, E. Waks<sup>2</sup>, <sup>1</sup>Hyattsville/US, <sup>2</sup>/US, <sup>3</sup>/KR

**14:00 - 14:30 WF3.2 - WHISPERING-GALLERY-MODE RESONATOR AT EXCEPTIONAL POINTS**

L. Yang, /US

**14:30 - 14:45 WF3.3 - OPTICALLY PUMPED 1  $\mu\text{m}$  LOW THRESHOLD PHOTONIC CRYSTAL SURFACE EMITTING LASERS GROWN ON GaAs SUBSTRATE**

A. Kalapala<sup>1</sup>, S. Yeom<sup>1</sup>, S. Addamane<sup>2</sup>, K. Reilly<sup>2</sup>, A. Song<sup>2</sup>, R. Gibson<sup>2</sup>, G. Balakrishnan<sup>3</sup>, R. Bedford<sup>2</sup>, S. Fan<sup>4</sup>, W. Zhou<sup>1</sup>, <sup>1</sup>Arlington/US, <sup>2</sup>/US, <sup>3</sup>Albuquerque/US, <sup>4</sup>Stanford/US

**14:45 - 15:00 WF3.4 - MODE-LOCKING WITH HERMITE-GAUSSIAN MODES**

Y. Sun<sup>1</sup>, F. Bretenaker<sup>1</sup>, A. De Rossi<sup>2</sup>, <sup>1</sup>Orsay/FR, <sup>2</sup>PALAISEAU Cedex/FR

WG3

**13:30 - 15:00 Comb Based Lasers and Waveguides**

**La Vista D/E**

Moderation: C.-K. Tan, Potsdam/US

**13:30 - 14:00 WG3.2 - FREQUENCY MODULATED COMBS IN SEMICONDUCTOR LASERS**

B. Schwarz<sup>1</sup>, N. Opacak<sup>1</sup>, J. Hillbrand<sup>1</sup>, M. Beiser<sup>1</sup>, G. Strasser<sup>1</sup>, R. Weih<sup>2</sup>, A. Schade<sup>3</sup>, S. Höfling<sup>3</sup>, D. Auth<sup>4</sup>, S. Breuer<sup>4</sup>, M. Piccardo<sup>5</sup>, F. Capasso<sup>5</sup>, <sup>1</sup>Wien/AT, <sup>2</sup>Gerbrunn/DE, <sup>3</sup>Würzburg/DE, <sup>4</sup>Darmstadt/DE, <sup>5</sup>Cambridge/US

**14:00 - 14:15 WG3.3 - DIRECT SEMICONDUCTOR DIODE LASER MODE ENGINEERING AND WAVEGUIDE DESIGN**

P. Strzebonski<sup>1</sup>, K. Choquette<sup>2</sup>, <sup>1</sup>Urbana/US, <sup>2</sup>Champaign/US

**14:15 - 14:30 WG3.4 - LINEWIDTH BROADENING FACTOR OF AN INTERBAND CASCADE LASER OPERATED ABOVE THRESHOLD**

B.-B. Zhao<sup>1</sup>, Y.-T. Gu<sup>2</sup>, C. Wang<sup>2</sup>, <sup>1</sup>/CN, <sup>2</sup>Shanghai/CN

WH3

**13:30 - 14:30 Optical Communications**

**La Vista F**

Moderation: R. Briggs, Pasadena/US

**13:30 - 14:00 WH3.1 - LASER COMMUNICATION TECHNOLOGIES FOR SPACE APPLICATIONS**

S. Mariojouis<sup>1</sup>, T. Anfray<sup>1</sup>, P. Berceau<sup>1</sup>, L. Blarre<sup>1</sup>, J. Hauden<sup>2</sup>, A. Mottet<sup>2</sup>, H. Porte<sup>2</sup>, J.-J. Bonnefoy<sup>2</sup>, A. Laurent<sup>2</sup>, T. Schmitt<sup>2</sup>, R. Cousty<sup>2</sup>, <sup>1</sup>toulouse/FR, <sup>2</sup>/FR

**14:00 - 14:30 WH3.2 - SUPERCONDUCTING NANOWIRE SINGLE PHOTON DETECTORS FOR DEEP SPACE OPTICAL COMMUNICATION AND FUNDAMENTAL SCIENCE**

M. Shaw, /US

**15:00 - 15:30 Coffee Break**

**La Vista & El Mirador Foyers**