
Session Title: [We-V] Distributed Sensing and Signal Processing
Date and Time: April 26, 2017 (Wednesday), 10:45-12:25
Session Chairs: Xiaoyi Bao (University of Ottawa, Canada)
Bai-Ou Guan (Jinan University, China)

[We-V1] 10:45-10:57 (Paper No. 10323-21)

New Improvements for Brillouin Optical Time-Domain Reflectometry

Sébastien Le Floch and Florian Sauser

University of Applied Sciences of Western Switzerland, Switzerland.

[We-V2] 10:57-11:09 (Paper No. 10323-42)

Characterization of Depolarized GAWBS for Optomechanical Sensing of Liquids Outside Standard Fibers

Neisei Hayashi¹, Yosuke Mizuno², Kentaro Nakamura², Sze Yun Set¹, and Shinji Yamashita¹

¹The University of Tokyo, Japan, ²Tokyo Institute of Technology, Japan

[We-V3] 11:09-11:21 (Paper No. 10323-175)

Discrimination of Temperature and Strain by Combined Refractive Index and Birefringence Measurements Using Coherent Rayleigh Sensing

Xin Lu, Marcelo A. Soto, and Luc Thévenaz

EPFL Swiss Federal Institute of Technology, Switzerland

[We-V4] 11:21-11:33 (Paper No. 10323-205)

Pulse Compression Phase Sensitive Optical Time Domain Reflectometer with Sub-Meter Resolution

Bin Lu^{1,2}, Zhaoyong Wang^{1,2}, Hanrong Zheng^{1,2}, Qing Ye¹, Ronghun Qu¹, Howell Zhao³, and Haiwen Cai¹

¹Chinese Academy of Sciences, China, ²University of Chinese Academy of Sciences, China, ³Shanghai Bandweaver Communication Technologies Co., Ltd., China

[We-V5] 11:33-11:45 (Paper No. 10323-297)

Fast Sinusoidal Frequency Scan OFDR for Long Distance Distributed Acoustic Sensing

Lihi Shiloh and Avishay Eyal

Tel Aviv University, Israel

[We-V6] 11:45-11:57 (Paper No. 10323-306)

Brillouin Optical Time-Domain Analyzer for Extended Sensing Range Using Probe Dithering and Cyclic Coding

Haritz Iribas¹, Alayn Loayssa¹, Florian Sauser², Miguel Llera², and Sébastien Le Floch²

¹Universidad P ublica de Navarra, Spain, ²HE-ARC, Switzerland



April 24-28, 2017 / Maison Glad Hotel, Jeju, Korea

Convention Hall (1F)

Session Title: [We-V] Distributed Sensing and Signal Processing
Date and Time: April 26, 2017 (Wednesday), 10:45-12:25
Session Chairs: Xiaoyi Bao (University of Ottawa, Canada)
Bai-Ou Guan (Jinan University, China)

[We-V7] 11:57-12:09 (Paper No. 10323-375)

20 dB SNR Enhancement in Phase-Sensitive OTDR Using Pulse Stretching and Recompression

Juan Pastor-Graells¹, Luis Romero Cortés², Hugo F. Martins³, María R. Fernández-Ruiz¹, José Azaña²,
Sonia Martin-Lopez¹, and Miguel Gonzalez-Herraez¹

¹Universidad de Alcalá, Spain, ²Institut National de la Recherche Scientifique, Canada, ³FOCUS S. L.,
C/ Orellana, Spain

[We-V8] 12:09-12:21 (Paper No. 10323-490)

OTDR based on Brillouin Dynamic Grating in an E-Core Two-Mode Fiber for Simultaneous Measurement of Strain and Temperature Distribution

Yong Hyun Kim and Kwang Yong Song
Chung-Ang University, Korea