Metodi Plamenov Yankov - DTU Orbit (02/12/2017)

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Department of Photonics Engineering - Postdoc, Former

Publications:

**Experimental Comparison of Probabilistic Shaping Methods for Unrepeated Fiber Transmission**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Characterization and optimization of a high-efficiency AlGaAs-On-Insulator-based wavelength converter for 64- and 256-QAM signals**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Digital signal processing for fiber nonlinearities [Invited]**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Experimental analysis of pilot-based equalization for probabilistically shaped WDM systems with 256QAM/1024QAM**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**Low-complexity Joint Sub-carrier Phase Noise Compensation for Digital Multi-carrier Systems**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**Nonlinear Phase Noise Compensation in Experimental WDM Systems with 256QAM**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Phase Noise Compensation for Nonlinearity-tolerant Digital Sub-carrier Systems with High-order QAM**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Prediction of Second-Order Moments of Inter-Channel Interference with Principal Component Analysis and Neural Networks**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**Temporal probabilistic shaping for mitigation of nonlinearities in optical fiber systems**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Characterization of a Wavelength Converter for 256-QAM Signals Based on an AlGaAs-On-Insulator Nano-waveguide**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

**Constellation Shaping for WDM systems using 256QAM/1024QAM with Probabilistic Optimization**

Publication: Research - peer-review › Journal article – Annual report year: 2016

**Experimental Comparison of Gains in Achievable Information Rates from Probabilistic Shaping and Digital Backpropagation for DP-256QAM/1024QAM WDM Systems**

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

**Experimental Study of Nonlinear Phase Noise and its Impact on WDM Systems with DP-256QAM**

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

**Temporal Probabilistic Constellation Shaping for WDM Optical Communication Systems**

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

**Achievable Information Rates on Linear Interference Channels with Discrete Input**

Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

**Approximating the constellation constrained capacity of the MIMO channel with discrete input**

Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

**Capacity Estimation and Near-Capacity Achieving Techniques for Digitally Modulated Communication Systems**

Publication: Research › Ph.D. thesis – Annual report year: 2016

**Compensation of XPM Interference by Blind Tracking of the Nonlinear Phase in WDM Systems with QAM Input**

Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

**Low-Complexity Tracking of Laser and Nonlinear Phase Noise in WDM Optical Fiber Systems**

Publication: Research - peer-review › Journal article – Annual report year: 2015

**Constellation Shaping for Fiber-optic Channels with QAM and High Spectral Efficiency**

Publication: Research - peer-review › Journal article – Annual report year: 2014

**Factorization properties of the optimal signaling distribution of multi-dimensional QAM constellations**

Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Improved Energy Efficiency for Optical Transport Networks by Elastic Forward Error Correction
Publication: Research - peer-review › Journal article – Annual report year: 2014

Rate-adaptive Constellation Shaping for Near-capacity Achieving Turbo Coded BICM
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Projects:

Information Theory and Coding in Regenerative and Non-linear Fiber Optical Communications
Iqbal, S., Forchhammer, S., Oxenløwe, L. K., Yankov, M. P. & Zibar, D.
01/06/2016 → 31/05/2019
Project: PhD

Machine learning algorithms for emulation of nonlinear optical fibre impairments
Jones, R. T., Zibar, D. & Yankov, M. P.
01/11/2015 → 31/10/2018
Project: PhD

Design and Optimization of Coded Modulation Systems with Iterative and Non-iterative Processing
Yankov, M. P., Forchhammer, S., Larsen, K. J., Galili, M., Agrell, E. & Rasmussen, L. K.
01/12/2012 → 20/04/2016
Project: PhD