



## Research output

### **Performance analysis of packet layer FEC codes and interleaving in FSO channels**

Liu, J., Zhang, X., Blow, K. & Fowler, S., 22 Sept 2017, In: IET Communications. 11, 13, p. 2042-2048

### **Characteristics and stability of soliton crystals in optical fibres for the purpose of optical frequency comb generation**

Zajnulina, M., Böhm, M., Bodenmüller, D., Blow, K., Boggio, J. M. C., Rieznik, A. A. & Roth, M. M., 15 Jun 2017, In: Optics Communications. 393, p. 95-102 8 p.

### **Upgrading legacy long-haul WDM systems through unbalancing the proportion of 1s and 0s in the transmitted data**

Nahas, M. M. & Blow, K. J., 2 Sept 2016, In: IETE Journal of Research. 62, 5, p. 663-670 8 p.

### **Digital back propagation in soliton coherent transmission**

Yushko, O., Fedoruk, M., Blow, K., Redyuk, A., Turitsyn, S., Doran, N. & Ellis, A., 9 Nov 2015, *2015 Tyrrhenian International Workshop on Digital Communications, TIWDC 2015*. IEEE, p. 20-23 4 p.

### **Soliton radiation beat analysis of optical pulses generated from two continuous-wave lasers**

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### **A random channel access scheme for massive machine devices in LTE cellular networks**

Ilori, A., Tang, Z., He, J., Blow, K. & Chen, H-H., 9 Sept 2015, *2015 IEEE International Conference on Communications, ICC*. IEEE, p. 2985-2990 6 p.

### **The impact of pump phase-modulation and filtering on WDM signals in a fibre optical parametric amplifier**

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### **Simultaneous multiple channel all-optical NRZ to CSRZ and RZ to CSRZ format conversion using an SOA-NOLM**

Wahid, M. H. A., Nahas, M. M., Ibbotson, R. A. & Blow, K. J., Dec 2014, In: Optics Communications. 332, p. 55-58 4 p.

### **Comparison of bit error rate estimation methods for QPSK CO-OFDM transmission**

Le, T. S., McCarthy, M. E., Suibhne, N. M., Giacoumidis, E., Doran, N. J., Ellis, A. D. & Blow, K. J., 15 Nov 2014, In: IEEE Photonics Technology Letters. 26, 22, p. 2244-2247 4 p.

### **Bit error rate estimation methods for QPSK CO-OFDM transmission**

Le, S. T., Blow, K. J., Mezentsev, V. K. & Turitsyn, S. K., 1 Sept 2014, In: Journal of Lightwave Technology. 32, 17, p. 2951-2959 9 p.

### **Timing and phase jitter suppression in coherent soliton transmission**

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### **Nonlinear inverse synthesis and eigenvalue division multiplexing in optical fiber channels**

Prilepsky, J. E., Derevyanko, S. A., Blow, K. J., Gabitov, I. & Turitsyn, S. K., 1 Jul 2014, In: Physical Review Letters. 113, 1, 5 p., 013901.

**Investigation of the effect of an increased supervisory signal power in a high-loss loopback monitoring system**

Blow, K. & Nahas, M., 17 Apr 2014, In: IET Communications. 8, 6, p. 800-804 5 p.

**Power pre-emphasis for suppression of FWM in coherent optical OFDM transmission**

Le, T. S., Blow, K. & Turitsyn, S., 24 Mar 2014, In: Optics Express. 22, 6, p. 7238-7248 11 p.

**Spiral attractor created by vector solitons**

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**Generation of optical frequency combs in fibres: an optical pulse analysis**

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**Language independent on-off voice over IP source model with lognormal transitions**

Shaikh, A. D., Blow, K. J., Eberhard, M. A. & Fowler, S. A., 24 Sept 2013, In: IET Communications. 7, 14, p. 1449-1455 7 p.

**Adaptive sending rate over wireless mesh networks using SNR**

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**Comparison of numerical bit error rate estimation methods in 112Gbs QPSK CO-OFDM transmission**

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**Monitoring long distance WDM communication lines using a high-loss loopback supervisory system**

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**Hybrid squeezing of solitonic resonant radiation in photonic crystal fibers**

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**In-Motes EYE: a real time application for automobiles in wireless sensor networks**

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**Demonstration and characterisation of a non-inverting all-optical read/write regenerative memory**

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**Single channel 320Gbit/s short period dispersion managed transmission over 6000km**

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Widdowson, T., Malyon, D. J., Ellis, A. D., Smith, K. & Blow, K. J., Jun 1994, In: *Electronics letters*. 30, 12, p. 990-991 2 p.

## Projects

**HIPNET: 62058 - HIPNET**

Blow, K. & Eberhard, M.

29/05/06 → 30/08/11

## **Activities**

### **Advanced photonics congress (Event)**

Keith Blow (Peer reviewer)

2012

### **Journal of Modern Optics (Journal)**

Keith Blow (Editorial board member)

1 Jan 1998 → ...