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# **Recent Advances in DSP-Based Optical Communications**

Guest Editor:

#### Dr. Roger Giddings

School of Electronic Engineering, Bangor University, Bangor, UK

Deadline for manuscript submissions: closed (30 September 2018)

### Message from the Guest Editor

Digital signal processing (DSP) is a highly promising technology which has the potential to address the challenges facing future optical communication systems. DSP can be regarded as a highly powerful yet cost-effective technology due to today's mass produced, advanced digital semiconductor technologies. The application of DSP to other optical communication networks such as metro, access, LANs and data centres, has seen a great deal of attention from researchers in recent years. DSP can be exploited for implementing functions such as highly spectrally efficient modulation formats for increased link capacities, transmission impairment mitigation for improved transmission performance and intelligent optical transceivers for software defined, reconfigurable networks. Due to the finite speed and precision of real DSP hardware however, real-time demonstrations are essential to fully validate new DSP techniques and more and more research is now addressing the challenges of real-time DSP implementation.









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#### Prof. Dr. Gianluigi Ferrari

Department of Engineering and Architecture, University of Parma, Parco Area delle Scienze, 181/A, 43124 Parma, Italy

### Message from the Editor-in-Chief

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*Future Internet* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/futureinternet futureinternet@mdpi.com X@FutureInternet6