# Special Issue

# Information Theory of Optical Fiber

### Message from the Guest Editors

This Special Issue will address the following topics: *Nonlinear optical fiber communications:* - Propagation models, including information-theory-friendly models - Signaling with nonlinear Fourier transforms - Capacity, capacity bounds, and information rates - Coding and shaping tailored for fiber nonlinearity - Digital and analogue signal processing *Fiber-related channels:* - Modified fiber channels with new interesting features - Fiber channels with inline optical regenerators or phase-conjugation - Integrable channels (via nonlinear Fourier transform) *Direct-detection systems:* - Capacity, capacity bounds, and information rates - Stokes receivers - Channels with both ASE and thermal noise *Quantum communications:* - Holevo capacity - Capacity-achieving quantum receivers

### Guest Editors

Prof. Dr. Sergei K. Turitsyn

Prof. Dr. Gerhard Kramer

Dr. Marco Secondini

### Deadline for manuscript submissions

closed (30 June 2020)

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## Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

*Entropy* is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

## Editor-in-Chief

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