Special Issue

Recent Advances in Optical Turbulence

Message from the Guest Editors

Optical turbulence is caused by wind blowing over an aerodynamically rough region of the Earth's surface in the presence of a temperature gradient. Unfortunately, these detrimental effects have far-reaching consequences for astronomical imaging, free-space optical communications, remote sensing, laser radar, and other applications that require the transmission of optical waves through the atmosphere. Therefore, there is a need to study optical turbulence. This Special Issue will cover a range of topics from the field, including, but not limited to, the following:

- Theoretical and experimental results of optical turbulence;
- Novel models of optical turbulence or refractive index structure parameter C_n^2;
- Non-Kolmogorov spectra of optical turbulence;
- Power fluctuations or phase distortions caused by optical turbulence;
- Adaptive optics and other turbulence mitigation techniques;
- Simulation of optical turbulence;
- Optical turbulence's effect on imaging, free-space optical communications, remote sensing, laser radar, positioning, quantum communications, and other applications;
- Underwater turbulence.

Guest Editors

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Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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