



## About the cover: *Advanced Photonics* Volume 6, Issue 4

Aberrations and fluctuations in light fields induced by complex media have presented significant challenges to optical detection and communication systems. Consequently, there has been substantial scholarly interest in the study of embedded invariants, including spatial modes and polarizations. Coherence, a fundamental characteristic of light fields, is closely related to the statistical properties of a randomly fluctuating incoherent light field. Recently, researchers revealed that a general global coherence characteristic of incoherent light fields, namely coherence entropy, remains robust after transmission through unitary complex media.

The cover of *Advanced Photonics* Volume 6 Issue 4 features a schematic illustrating the robustness of the coherence entropy despite the deformation of individual modes. This research paves the way for the selection of modes suitable for generating incoherent light sources with potential applications in anti-turbulence communication.

The image is based on the research presented in the article by Xingyuan Lu, Zhuoyi Wang, Qiwen Zhan, Yangjian Cai, and Chengliang Zhao, “Coherence entropy during propagation through complex media,” *Adv. Photon.* 6(4), 046002 (2024), doi: 10.1117/1.AP.6.4.046002