

## About the cover: *Advanced Photonics* Volume 5, Issue 3

Spatiotemporal optical vortex (STOV) pulses can carry transverse orbital angular momentum (OAM) that is perpendicular to the direction of pulse propagation. For a STOV pulse, the spatiotemporal profile can be significantly distorted due to unbalanced dispersive and diffractive phases. This may limit its use in many research applications where a long interaction length and a tight confinement of the pulse is needed. The stable and robust transmission of transverse photonic OAM through optical fiber may open new opportunities for transverse photonic OAM studies in telecommunications, novel OAM lasers, and nonlinear fiber-optical research.

The image on the cover of *Advanced Photonics* Volume 5 Issue 3 illustrates the propagation of a spatiotemporal optical

vortex wavepacket through an optical fiber, based on original research presented in the article by Qian Cao, Zhuo Chen, Chong Zhang, Andy Chong, and Qiwen Zhan in their article "Propagation of transverse photonic orbital angular momentum through few-mode fiber" (doi 10.1117/1.AP.5.3.036002). This article presents the first demonstration of STOV pulse propagation through a few-mode optical fiber. The authors note that the wavepacket maintains its spatiotemporal phase structure well, demonstrating the new possibility of transmitting transverse OAM inside fiber.