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Fundamentals and Applications of Vortex Beams

Guest Editor:

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Message from the Guest Editor

Several decades have passed since the realization that vortex beams, light fields with an azimuthally varying phase, carry Orbital Angular Momentum (OAM). This event opened a new era of fundamental and applied research, with applications in optical manipulations, optical communications, optical metrology, imaging and laser remote sensing, amongst many others. This Special Issue seeks contributions from across the different fields related to vortex beams, from fundamental research, generation and characterization techniques, to applications in the different fields, as well as novel types of vortex beams. We expect contributions from the fields listed below, but we are not limited to these:

- Light beam shaping
- Structured light
- Vector beams
- Polarisation singularities
- Optical metrology
- Optical manipulations
- Optical communications
- Quantum Optics
- Imaging
- Optical fibers
- Metasurfaces
- Liquid crystal spatial light modulators



