



## About the cover: *Advanced Photonics* Volume 5, Issue 4

The interactions of light with metamaterial structures can be extremely complex to investigate especially when vectorial fields, oblique propagation directions, and multipolar contributions are considered. To ease the modelling procedure of metamaterials, a convenient and powerful theoretical framework is developed by connecting the spatial symmetries of these structures to their electromagnetic and scattering properties. This greatly reduces the complexity of the problem since only the relevant symmetry-invariant material properties and scattering parameters can be unambiguously identified. This opens the door for modelling elaborate structures that would be otherwise nearly impossible to theoretically describe.

The image on the cover for *Advanced Photonics* Volume 5 Issue 4 represents the interactions of a flat spiral shaped particle with an incident beam of light. From the perspective of spatial symmetries, this spiral is not a geometrical chiral object. However, thanks to the framework developed in the article “[Spatial symmetries in nonlocal multipolar metasurfaces](#)” by Karim Achouri, Ville Tiukuvaara, and Olivier J.F. Martin, it can be demonstrated that the particle nonetheless exhibits pseudochiral responses in the form of quadrupolar contributions.