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Metasurface polarization optics

EVENT DETAILS: Metasurfaces are an emergent class of subwavelength diffractive optics. The individual elements comprising a metasurface may be designed with polarization sensitivity \cite{1, 2} – in this way, metasurfaces can enable optical elements whose far-fields exhibit custom polarization-dependence. Using relatively simple design heuristics based on the Jones calculus, a variety of polarization-dependent optical elements can be realized. These include gratings (of particular interest for polarimetry \cite{3, 4}), lenses, and holograms (the most general case \cite{5}). In this talk, we discuss these metasurface polarization optics, their historical antecedents, their design, and new polarization-sensitive optical elements based on metasurfaces. Metasurfaces ideally provide new additions to the traditional toolkit of polarization optics and may soon reach a level of maturity that sees their inclusion in practical optical systems for polarimetric remote sensing and other applications.


ZOOM information:

https://tamu.zoom.us/j/98156251523?pwd=QVdSdgXgL1UyY0g1L083SU5QR0QrUT09

Meeting ID: 981 5625 1523
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