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Title:	Properties of spin and orbital angular momenta of light
Authors:	Chaturvedi, Arvind S (/jspui/browse?type=author&value=Chaturvedi%2C+Arvind+S) Mukunda, N (/jspui/browse?type=author&value=Mukunda%2C+N)
Keywords:	Properties of spin orbital angular momenta of light
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Abstract:	This paper analyses the algebraic and physical properties of the spin and orbital angular momenta of light in the quantum mechanical framework. The consequences of the fact that these are not angular momenta in the quantum mechanical sense are worked out in mathematical detail. It turns out that the spin part of the angular momentum has continuous eigenvalues. Particular attention is given to the paraxial limit, and to the definition of Laguerre–Gaussian modes for photons as well as classical light fields taking full account of the polarization degree of freedom.
Description:	Only IISER Mohali authors are available in the record.
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