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Title:	A classical optical approach to the “non-local Pancharatnam-like phases” in Hanbury-Brown-Twiss correlations
Authors:	Arvind (/jspui/browse?type=author&value=Arvind)
Keywords:	CLASSICAL AND QUANTUM MECHANICS Geometric phase HBT correlations
Issue Date:	2017
Publisher:	Elsevier B.V.
Citation:	Physics Letters, Section A: General, Atomic and Solid State Physics, 381 (14)
Abstract:	We examine a recent proposal to show the presence of nonlocal Pancharatnam type geometric phases in a quantum mechanical treatment of intensity interferometry measurements upon inclusion of polarizing elements in the setup. It is shown that a completely classical statistical treatment of such effects is adequate for practical purposes. Further we show that the phase angles that appear in the correlations, while at first sight appearing to resemble Pancharatnam phases in their mathematical structure, cannot actually be interpreted in that manner. We also describe a simpler Mach-Zehnder type setup where similar effects can be observed without use of the paraxial approximation.
Description:	Only IISERM authors are available in the record.
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