



# Library Indian Institute of Science Education and Research Mohali



**DSpace@IISERMohali (/jspui/)**

**/ Publications of IISER Mohali (/jspui/handle/123456789/4)**

**/ Research Articles (/jspui/handle/123456789/9)**

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/3186>

Title:	Estimation of dislocated phases in wavefronts through intensity measurements using a Gerchberg–Saxton type algorithm
Authors:	Asokan, S. (/jspui/browse?type=author&value=Asokan%2C+S.) Ameen Yasir, P.A. (/jspui/browse?type=author&value=Ameen+Yasir%2C+P.A.) Solomon Ivan, J. (/jspui/browse?type=author&value=Solomon+Ivan%2C+J.)
Keywords:	Gerchberg–Saxton type algorithm Intensity measurements Cylindrical lens Molecular physics
Issue Date:	2020
Publisher:	OSA - The Optical Society
Citation:	Applied Optics, 59(24), pp.7225-7232.
Abstract:	Estimation of the phase of a singular paraxial light field from experimentally measured intensities using a Gerchberg–Saxton type algorithm is demonstrated. A combination of cylindrical lenses which does not conserve the orbital angular momentum of the light field is used in obtaining the measured intensities. Consistent extraction of the phases in regard of the orbital angular momentum is demonstrated both at the input and output transverse planes, using the measured intensities.
URI:	<a href="https://www.osapublishing.org/ao/abstract.cfm?uri=ao-59-24-7225">https://www.osapublishing.org/ao/abstract.cfm?uri=ao-59-24-7225</a> ( <a href="https://www.osapublishing.org/ao/abstract.cfm?uri=ao-59-24-7225">https://www.osapublishing.org/ao/abstract.cfm?uri=ao-59-24-7225</a> ) <a href="http://hdl.handle.net/123456789/3186">http://hdl.handle.net/123456789/3186</a> ( <a href="http://hdl.handle.net/123456789/3186">http://hdl.handle.net/123456789/3186</a> )
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format
Need to add pdf.odt (/jspui/bitstream/123456789/3186/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text

[View/Open \(/jspui/bitstream/123456789/3186/1/Need%20to%20add%20pdf.odt\)](#)

[Show full item record \(/jspui/handle/123456789/3186?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/3186/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.