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Nota di contenuto	Introduction -- Phase-space Optics -- Radon-Wigner Display -- Separable Beams -- Rotationally Symmetric Beams -- General Beams -- Conclusions.
Sommario/riassunto	This thesis focuses on the fundamental problem of characterising partially coherent beams. The book describes several non-interferometric methods based on phase-space tomography for recovering the spatial coherence information of optical beams. In the context of optical beams, partially coherent light provides numerous advantages over coherent light. From microscopy to optical communications, there are many disciplines that benefit from using partially coherent beams. However, their range of applications currently remains limited due to the complexity of extracting information. In

addition to providing a feasible experimental solution for the general case, the book explores several situations in which beam symmetries are exploited to simplify the information extraction process. Each characterisation method is accompanied by a corresponding theoretical explanation and a thorough description of experimental examples.

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