

Applications of Weyl Ordered Two-Mode Wigner Operator for Quantum Mechanical Entangled System

FAN Hong-Yi

Department of Physics, Shanghai Jiao Tong University, Shanghai 200030, China
Department of Material Science and Engineering, University of Science and Technology of China, Hefei 230026, China
(Received: 2003-5-20; Revised: 2003-7-21)

Abstract: Based on the technique of integral within a Weyl ordered product of operators, we present applications of the Weyl ordered two-mode Wigner operator for quantum mechanical entangled system, e.g., we derive the complex Wigner transform and its relation to the complex fractional Fourier transform, as well as the entangled Radon transform.

PACS: 03.65.-w, 03.65.Ud

Key words: Weyl ordering, two-mode Wigner operator, entangled system

[\[Full text: PDF\]](#)

Close