

中央大學物理學系

Department of Physics, National Central University



Colloquium

Optical Heterodyne Interferometer Based on a Double-pass Acousto- optic Frequency Shifter

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Date: 2024/05/14 (Tue)

Venue: S4-625

Time: 14:00-16:00

Abstract:

In this talk, I will introduce the works of an optical heterodyne interferometer based on a double-pass acousto-optic frequency shifter (AOFS). First, I will briefly review the basic principles of AOFS and optical heterodyne interferometry. Then, I will show how to build the optical heterodyne interferometer based on a double-pass AOFS and its applications, including laser frequency locking to an etalon, environment-noise-free optical retardation measurement, and high-sensitive photo-thermal spectroscopy.