

Interference Experiment with Two Coherent Acoustic Sources

Abstract

As for the "Interference Experiment", we design and carry out a specific experiment by means of sound wave to demonstrate the phenomenon of interference. However, if we rely on *the general Double-slit Interference Theory*, as most college physics textbooks illustrate, the experimental result holds roughly 16% inaccuracy. To be specific, the inaccuracy is mainly system error. Thus, we design the second experiment, ameliorating methods of data processing. Consequently, the inaccuracy is limited within 4%, which might be helpful for students to comprehend the essence of interference phenomenon deeply.