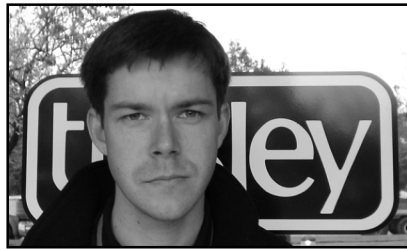


Physics Department Seminar

Friday February 18th, 2005

11:00am in PhSc 105

“Optical Testing System Errors”



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Abstract:

Optical testing takes patience and consistency, however seeing is not always believing in optical alignment. Distinguishing between part aberrations and system alignment aberrations in test setups is sometimes difficult and frustrating. Fortunately, there is an intelligible solution to the problem in on-axis setups, rotational averaging. This solution, however, is not error proof. Through some simple examinations, we will isolate the limits and accuracy of system tests, learn to understand how precise our measurements need to be, and discuss some simple ideas to minimize the errors in an optical test. We will also discuss how this can help with the final optical system alignment.