Physics Department Alumni Seminar

Friday October 29th, 2010

12:00 pm in PHSC 108

Construction of Alignment Modes

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Abstract: Alignment of optical systems can be tricky. Highly sensitive systems can require element motions down to the submicron level. Thankfully, we live in a technical age where calculations are performed with computers and motions with pico-motors. A technique for alignment of a non-trivial optical system using alignment modes and interferometry will be presented. I will also discuss the necessity of constructing alignment modes as well as some of the tools required to construct them (Matlab, Gram-Schmidt Procedure, etc.).