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Measuring Young's Modulus of Glass by Optical Interference AL-

BERT POPSON, West Virginia Wesleyan College — Two small plates of glass are separated by a thin film of air and suspended between two support posts. Light from a coherent source is reflected from the surfaces, creating an interference pattern. An applied load changes the thickness of the film of air, which affects the interference pattern. Young's modulus can be calculated from measurements of changes in the interference fringes as a function of load.

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