

1035-49-23

**George Leitmann\*** (gleit@berkeley.edu), Berkeley, CA 94720. *A Transformation-Based Optimization Method.*

Classical sufficiency conditions for absolute extrema are derived by means of a transformation based approach employing the equivalent problem device. The simplest problem of the Calculus of Variations as well as various classes of optimal control and dynamic games problems are addressed. This approach allows for a simple, direct and succinct treatment which leads to constructive sufficiency conditions. Indeed, no proof exceeds one page in length and most are but a few sentences long. (Received May 22, 2007)