CALIFORNIA STATE UNIVERSITY, LONG BEACH

THE MATHEMATICS COLLOQUIUM

Presents

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Speaking on

On the Role of Mathematics in Directing National Security Policies

Friday October 12, 2007   12:00noon - 1:00PM

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Abstract: Historically mathematics and science have had little or no role in shaping national policies, in particular national security agendas. However, in the latter part of the twentieth century, a large number of scientists, engineers and mathematicians were involved not just in the traditional arena of design and development but also in influencing the shape of public policies, as well.

In this talk, we will present a small aspect, via an example, of how mathematical modeling, specifically mathematical optimization, can help with policy level decision making. In particular, we will present an analytic framework and model for evaluating options for overseas basing. The ability of the U.S. forces to provide swift and tailored response to a multitude of threats across the globe is a crucial component of security in today's complex political environment. One of the major pillars for achieving these objectives is global basing architecture. Both mathematical methodology and the policy implications will be discussed.