

MATHEMATICAL SCIENCES LECTURE SERIES

College of Liberal Arts & Sciences

Tony Chan

Dean of Physical Sciences, UCLA

Opportunities for Interdisciplinary Research involving the Mathematical Sciences — A Personal Perspective

Date: Thursday, December 8, 2005

Lecture: 4:05 – 4:55 pm

Location: Room 101 Little Hall

Refreshments: At 3:30pm

OPENING REMARKS BY

**Win Phillips, VP for Research
and**

**Jeffrey Krause, Director of the
Quantum Theory Project**



Abstract:

With the recent emphasis on interdisciplinary research across the academic and federal research enterprises, the issue of how the mathematical sciences can participate in this new environment becomes an important one for individual researchers, university administrators, and funding agencies. At one level, mathematics, long serving as both the “queen” and the “language” of science, is in the best position among the hard sciences in this endeavor. On the other hand, to the extent that the mainstream mathematics community takes an inward and insular approach to its values, emphasis and culture, there is a risk that it may miss important opportunities to collaborate with other disciplines. I’ll give a personal perspective on these issues, based on my experience as a faculty researcher, university administrator and serving on advisory committees of funding agencies.

Tony Chan is Professor of Mathematics and Dean of the Division of Physical Sciences in the College of Letters and Sciences at UCLA. He is one of the founding members of Institute for Pure and Applied Mathematics (IPAM) at UCLA. Tony Chan is well-known for his interdisciplinary research at the interface between applied mathematics and current rapidly developing areas in image processing, computer vision, VLSI circuit layout and advanced architecture parallel computers. He is one of the few scholars with rare administrative and organizational skills which he has put to good use in advancing the image of mathematics and mathematicians in the eyes of the public and the policy makers in the United States. His boundless energy and enthusiasm for the promotion of mathematics is legendary. He serves on the committees of scientific bodies like the Society of Industrial and Applied Mathematics (SIAM), American Mathematical Society, National Science Foundation (US) and the Lawrence Livermore National Laboratory (US). He is also on the editorial boards of numerous well-known international journals on applied mathematics and scientific computing.

This Lecture Series is sponsored by The Mathematical Sciences Committee. The Committee seeks to identify emerging scientific fields that have strong mathematical components; promote education in these fields; encourage and support collaborative research; coordinate responses to interdisciplinary proposal solicitations; and explore more formal organizational structures that will bridge the mathematical sciences and their applications.