THE UNIVERSITY   **OF HONG KONG**

Institute of Mathematical Research

Department of Mathematics

Geometry Seminar

July 30, 2004 (Friday)

517 Meng Wah Complex, HKU

3:00 – 4:00pm   **Professor Mark Andrea de Cataldo**
SUNY at Stony Brook, USA

The Hodge theory of algebraic maps

4:00 – 4:20 pm   *Tea Break*

4:20 – 5:20pm   **Professor Robert Lazarsfeld**
University of Michigan, Ann Arbor, USA

Some old results on linear series

All are welcome

Geometry Seminar

July 30, 2004 (Friday)

Abstracts

Professor Mark Andrea de Cataldo
SUNY at Stony Brook, USA

The Hodge theory of algebraic maps

I will discuss informally some topological aspects of complex algebraic maps. I will discuss briefly the so-called Decomposition Theorem for these maps. Finally, I will survey some aspects of my recent work with Luca Migliorini (at Bologna) on new structures on the cohomology of projective varieties.

Professor Robert Lazarsfeld
University of Michigan, Ann Arbor, USA

Some old results on linear series

I'll discuss new approaches (due to various people) to some old theorems concerning linear series on algebraic varieties. This will give an occasion to explain some interesting facts and arguments that aren't as well known as they deserve to be.