THE UNIVERSITY   **OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

Geometry Seminar

Conformal field theory, *S*-matrices and Rogers-Ramanujan type identities

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Abstract

The crucial concepts of quantum field theory are explained (*n*-point functions, operator product expansion, partition functions) and specialized to conformally invariant quantum field theories in two dimensions. Integrable massive perturbations of such theories have particles with computable scattering and their partition functions are computable, too. In the conformal limit this leads to Rogers-Ramanujan type representations of the partition function and deep relations to algebraic *K*-theory.

Date:	June 30, 2004 (Wednesday)
Time:	4:00 – 5:00pm
Place:	Room 517, Meng Wah Complex

All are welcome