



香港浸會大學

HONG KONG BAPTIST UNIVERSITY

Institute for Computational Mathematics Colloquium

The LLL Algorithm and Its Applications

Speaker : Prof. Sanzheng Qiao
Institute for Computational Mathematics
Hong Kong Baptist University

Date : 8 October 2009 (Thursday)

Time : 3:00 - 4:00 p.m.

Venue : FSC1217, Fong Shu Chuen Library
HSH Campus
Hong Kong Baptist University

Abstract:

The LLL algorithm, originated from Lenstra, Lenstra, Jr, and Lovasz, is a lattice basis reduction method. Wide applications ranging from cryptography to communications have been found since the publication of the original paper in 1982. In this talk, we first describe the original algorithm and a matrix interpretation of the algorithm and some properties in terms of matrix conditioning. Then we present a pivoting scheme and a proof of its convergence. Finally, possible future work is discussed.

- All interested are welcome -

For further information, please visit <http://www.math.hkbu.edu.hk/>, or call 34115056.