



香港中文大學
The Chinese University of Hong Kong

Institute of Theoretical Computer Science and Communications

ITCSC Colloquium

**Bipartite Ratio And Bipartite Density Of Triangle Free
Subcubic Graphs**

By

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2:30pm - 3:30pm

Rm. 121, Ho Sin Hang Engineering Building, CUHK

Abstract:

The Max-Cut problem is to find an edge-cut of a graph of maximum cardinality. The problem arises from applications in VLSI, and has been studied extensively in the literature. An equivalent formulation of the problem is to find a maximum bipartite subgraph (i.e., a bipartite subgraph with maximum number of edges) of a given graph. For subcubic graphs, i.e., graphs with maximum degree at most 3, the problem is related to the problem of finding an induced bipartite subgraph of maximum number of vertices. This talk surveys some recent work on the study of maximum induced bipartite subgraph and maximum bipartite subgraphs of subcubic graphs.

Biography:

Professor Zhu Xuding obtained his first degree from Wuhan University of Hydraulic and Electric Engineering in China, his Master degree from Huazhong University of Science and Technology in China, and his Ph.D. from The University of Calgary in Canada. Prof. Zhu was a post-doctoral fellow in Simon Fraser University in Canada, and Universitdt Bielefeld in Germany in 1991-1993 and 1993-1995, respectively, and he has been teaching in the Department of Applied Mathematics, National Sun-Yat-sen University in Taiwan since 1995. Prof. Zhu received many awards, including Outstanding Research Award, Research Distinction Award and Distinguished Research Professorship, in the past few years. He was also invited to the Editorial board of famous international journals including SIAM Journal on Discrete Mathematics, Journal of Graph Theory, and Bulletin of Academia Sinica.

***** ALL ARE WELCOME *****