

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research*

*HKU – Pasteur Research Centre*

## WORKING SEMINAR ON CONCEPTUALIZED BIOLOGY:

# Statistical Modeling of Natural Language with implications for the language of life

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### Abstract

I will present a quick paced introduction to statistical modeling of natural language and its use in computational linguistics and in language technologies (speech recognition, machine translation, etc.). Among the topics discussed will be: how can we model the space of sentences, how much can we learn from a single occurrence, and what we have learned about the information content of language. Time permitting, I will discuss the Shannon Game and modeling the semantic coherence of language. Through the talk I will draw a strong analogy to the language of life (DNA, RNA, protein), discuss similarities and differences, and point to potential applications in computational molecular biology.

**Date: January 29, 2003 (Wednesday)**

**Time: 2:30 – 4:00pm**

**Place: Room 517, Meng Wah Complex**

*All are Welcome*