

博弈論初探

Introduction to Game Theory

講者：香港中文大學數學系導師
劉智軒博士

Speaker: Dr. LAU Chi Hin,
Instructor, Department of Mathematics
The Chinese University of Hong Kong

摘要 ABSTRACT

著名數學家John Nash 於1951年發表了一篇關於博弈論的重要論文。這篇論文使他於1994年獲得諾貝爾經濟學獎；他的傳奇故事更被拍成電影《有你終生美麗》。博弈論是研究最佳策略的一套理論，它在經濟、生物、政治及社會學均有重要和廣泛的應用。本講座首先會透過介紹經典的「囚徒困境」解釋博弈論的基本概念，然後討論如何尋找最佳策略及博弈論的一些應用。

In 1951, the famous mathematician John Nash published an important paper on Game Theory. Because of this paper, he became a Nobel Laureate in Economics in 1994. He is also the subject of the Hollywood movie “A beautiful mind” which won four Academy Awards. Game theory is a theory about finding best strategies. It has a lot of applications in economics, biology, political science and social science etc. The talk will start by introducing the classic example “Prisoner’s dilemma”. The basic ideas of Game Theory and some of its applications will be discussed.

講者簡介 Speaker’s Biography

劉智軒博士在香港中文大學取得理學士、哲學碩士及教育文憑，以及在香港大學取得哲學博士，主要研究複幾何；現任教於香港中文大學數學系，並為國際數學奧林匹克香港代表隊領隊及訓練工作。

Dr. Chi Hin Lau holds a B.Sc. and an M.Phil. degree from The Chinese University of Hong Kong and a Ph.D. degree in Mathematics from The University of Hong Kong. He was the leader of the International Mathematics Olympiad Hong Kong Team held in Mexico. He is currently an Instructor in the Department of Mathematics at The Chinese University of Hong Kong and a member of International Mathematics Olympiad Hong Kong committee.

綠色熒光蛋白與生物科學研究

Green Fluorescent Proteins in Life Sciences Research

講者：香港中文大學生物系教授
姜里文教授

Speaker: Professor JIANG Liwen,
Professor, Department of Chemistry
The Chinese University of Hong Kong

摘要 ABSTRACT

近年來綠色螢光蛋白在生命科學領域已經成為非常重要的工具。在本報告中，我將先簡要與大家分享我在香港中文大學九年的教學和科研經驗。之後我會介紹關於在生命科學領域中綠色螢光蛋白的應用及其發展。

Green Fluorescent Protein (GFP) has become an important tool in Life Science Research in recent years. In this presentation, I will first briefly share my 9-year teaching and research experience at CUHK. I will then make a general introduction about the development and application of using GFP in Life Science Research.

講者簡介 Speaker’s Biography

姜里文教授於華南農業大學獲得理學學士學位。之後他先後分別在加拿大英屬哥倫比亞大學和西蒙菲沙大學獲得理學碩士和理學博士學位。在2000年加盟香港中文大學生物系作為助理教授之前，他於華盛頓州立大學進行了為時4年的博士後研究工作。之後，他分別於2004年及2007年晉升為副教授和教授。

Professor Jiang Liwen received his BSc from South China Agricultural University. He then continued his studies in Canada, obtaining his MSc from the University of British Columbia and his PhD from Simon Fraser University. He spent four years on his postdoctoral research at Washington State University prior to joining the Department of Biology at CUHK as an assistant professor in 2000. He was promoted to associate professor and professor in 2004 and 2007 respectively.

姜教授曾獲得多項享有聲譽的獎項包括2008年的“香港中文大學理學院傑出教學獎”，2006-2007年度的「傑出科研獎」，以及2009-2010年度的“裘槎基金會-優秀科研者獎”。他的研究主要是關注植物細胞中蛋白運輸，以及細胞器生物形成的分子機制，同時還有它們在生物反應器中的潛在應用。

Professor Jiang have received several prestigious awards including the CUHK Science Faculty Exemplary Teaching Award 2008, the CUHK Research Excellence Award 2006-2007, and the Croucher Senior Research Fellowships 2009-2010. His research focuses on the molecular mechanisms of protein trafficking and organelle biogenesis in plant cells, as well as their potential applications in plant biotechnology.

第五屆柳愛華紀念科學講座

The 5th Lau Oi Wah Memorial Science Lecture Series

Date 日期: 07-11-2009
Time 時間: 09:30 - 13:00
Venue 地點: 香港中文大學邵逸夫
Sir Run Run Shaw Hall

理學院及柳愛華紀念基金主辦
Organised by Faculty of Science &
Lau Oi Wah Memorial Fund
<http://www.cuhk.edu.hk/sci/memorialtalk>

講座程序表 LECTURE SERIES SCHEDULE		
時間 Time	節目 Programme	講者 Speaker
09:30 - 09:45	進場及登記 Registration	
09:45 - 10:00	開幕禮 Opening Ceremony	
10:00 - 10:40	中醫——預防與治療疾病的科學 Chinese Medicine: A Science of Disease Prevention and Healing	梁榮能教授 Prof. LEUNG Wing Nang Albert
10:40 - 11:20	計算化學 Doing Chemistry with Computers	李偉基教授 Prof. LI Wai Kee
11:20 - 11:40	小休 Break	
11:40 - 12:20	博弈論初探 Introduction to Game Theory	劉智軒博士 Dr. LAU Chi Hin
12:20 - 13:00	綠色熒光蛋白與生物科學研究 Green Fluorescent Proteins in Life Sciences Research	姜里文教授 Prof. JIANG Liwen

中醫

Chinese Medicine:
A Science of Disease Prevention and Healing

---- 預防與治療疾病的科學

講者：香港中文大學中醫學院副院長
梁榮能教授Speaker: Professor LEUNG Wing Nang Albert,
Associate Director, School of Chinese Medicine,
The Chinese University of Hong Kong

摘要 ABSTRACT

中國醫學有三千多年的歷史，其診斷和治療疾病的方法既獨特而又神秘。一位中醫醫生是怎樣通過「把脈」知道病人身體狀況的？舌診的臨床意義又是什麼？中醫的診斷治療方法究竟有沒有科學的依據呢？是次講座即將與你從傳統和現代科學兩個不同的角度來討論中國醫學。

Chinese medicine has over 3000 years of history. The methods used in diagnosis and treatment of diseases are mysterious and different from modern medicine. How can a Chinese medicine doctor know the health condition of a patient by pulse sensation? What is the clinical meaning of tongue examination? Is there any scientific basis behind diagnosis and treatment? This lecture will discuss some areas of Chinese medicine from both the traditional and modern scientific views.

講者簡介 Speaker's Biography

梁榮能教授畢業於香港中文大學生物化學系，並於澳洲蒙納殊大學取得生化醫學博士。在回港工作之前，他分別在瑞士及美國繼續其博士後訓練。梁教授多年來進行中藥抗癌的藥理研究工作；現為註冊中醫師。現任香港中西醫結合學會副會長及中文大學中醫學院副院長。

Professor Albert Leung graduated from the Department of Biochemistry, CUHK. He received his Ph.D. in Medical Biochemistry at Monash University, Australia. He then pursued his postdoctoral training in Switzerland and the U.S. before returning to work in Hong Kong. He is now a Registered Chinese Medicine Practitioner, vice-President of the Hong Kong Association for Integration of Chinese-Western Medicine and the Associate director of the School of Chinese Medicine, CUHK.

計算化學

Doing Chemistry with Computers

講者：香港中文大學生物化學系榮休講座教授
李偉基教授Speaker: Professor Li Wai Kee,
Emeritus Professor of Chemistry, Department of Chemistry,
The Chinese University of Hong Kong

摘要 ABSTRACT

在計算化學這個研究領域，我們通過解答有關體系的薛定諤微分方程來解決化學問題。計算化學始於大約八十年前量子力學建立時，但是求解典型分子的薛定諤方程在數學上是非常困難。經過了半個世紀理論模型及相關數學的發展，和更大更快的電子計算機日趨普及，到上世紀末，化學家已經可以通過計算來解答有意義的化學問題。目前，計算結果已準確至對實驗工作者可提供不可或缺的幫助。本講座就相關計算方法作一簡要說明，並以幾個簡單例子來演示利用計算可以解答的化學問題。

In computational chemistry we answer chemical questions by solving the Schrödinger equation of the system under investigation. This field came into being about eighty years ago, when quantum mechanics was developed. But solving the Schrödinger equation for typical molecules remained mathematically daunting for more than half of a century. After decades of work on the theoretical models and the development of faster and bigger computers, chemists were able to employ calculations to solve meaningful chemical problems in the last twenty years of the last century. At present, we can obtain computational results that are of sufficient accuracy to be useful to experimentalists. In this talk, a brief description of the methodology will be given. In addition, there will be a few simple examples, illustrating the kinds of chemical results which can be achieved by computation.

講者簡介 Speaker's Biography

李偉基教授於一九六八年起任教香港中文大學，於二零零六榮休講座教授。於一九八八年至一九八九年及二零零一年至任化學系系主任。李教授的主要研究範圍包括理論化學及究過程不用進行實驗，但他樂於運用計算方法協助實驗工取得的數據。

年退休，現任化學二零零四年期間曾擔任計算化學，換言之，研作者分析及詮釋從實驗中

Professor Wai-Kee Li started his teaching career at The Chinese University of Hong Kong in 1968 and he retired in 2006. He is currently Emeritus Professor of Chemistry. He served as the Chairman of Department of Chemistry during the periods of 1988-1989 and 2001-2004. His research interest is in the area of theoretical and computational chemistry. In other words, he and his associates do not do experiments. But he enjoys collaborating with experimentalists by carrying out calculations in order to help them analyze and interpret the data they have obtained in their laboratories.

理學院院長的話 Message from the Dean of Science



The Lau Oi-Wah Memorial Science Lecture Series was established in 2005, in recognition of Professor Lau Oi-Wah's contribution to Science Education at The Chinese University of Hong Kong (CUHK) and in Hong Kong in general.

Professor Lau obtained her B.Sc. degree in 1965 from the University of Hong Kong (HKU). She joined Chung Chi College of CUHK as an Assistant Lecturer in 1968, when she was still working on her Ph.D. thesis. After the completion of her doctoral degree in inorganic chemistry in 1970 at HKU, she became a Lecturer at CUHK. She was promoted to Senior Lecturer in 1982 and Reader in 1993. She was awarded a Leverhulme Foundation Fellowship in 1971 by Imperial College, London and an Honorary Research Fellowship in 1978 by the University of Birmingham. Professor Lau became a Chartered Chemist and an elected Fellow of the Royal Society of Chemistry, U.K., in 1981. She was elected to be the Dean of the Science Faculty for three successive terms, from 1994 to her retirement in 2003.

Professor Lau was a dedicated teacher and a caring research advisor. During her academic career, she supervised seven Ph.D. students and about 30 M.Phil. students. I am an alumnus of CUHK and was lucky to have Professor Lau as my teacher in analytical chemistry when I was an undergraduate in 1968. Our class was probably the first class that she taught at CUHK. Since Professor Lau was just a few years older than us, and because of her warm personality, we always viewed her as our older sister. Other than an outstanding chemist and teacher, Professor Lau was also an excellent ping-pong player and was an active participant in most student activities. Her energy, as manifested in her ping-pong game, was second to none.

Professor Lau was a devoted teacher who always put her students' learning and benefit first. During her Deanship, she had successfully pushed for the establishment of many interdisciplinary teaching and research programs. This remains a direction for the curricula developments of the Science Faculty. In addition to university teaching, she had also initiated an effort to promote science education in secondary schools. In order to recognize Professor Lau's contribution to science education in Hong Kong and to commemorate her commitment to education in general, her friends and students have established a memorial fund to support the Lau Oi-Wah Memorial Science Lecture Series, after the passing of Professor Lau. This Lecture Series began in 2005, so this is the fifth of the Series. Professor Lau's dedication, which continues to this day with this Lecture Series, has served Hong Kong high school students well, inspiring them to consider a career in science. As a former student of Professor Lau, I am honored to succeed her as Dean of Science. Returning to my alma mater to serve in this capacity, I feel that her dedicated spirit is always with us, helping us to succeed.

Ng, Cheuk-Yiu
Dean
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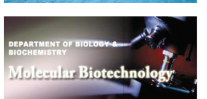
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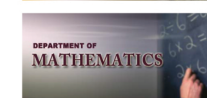
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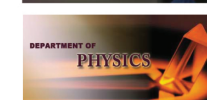
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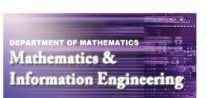
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