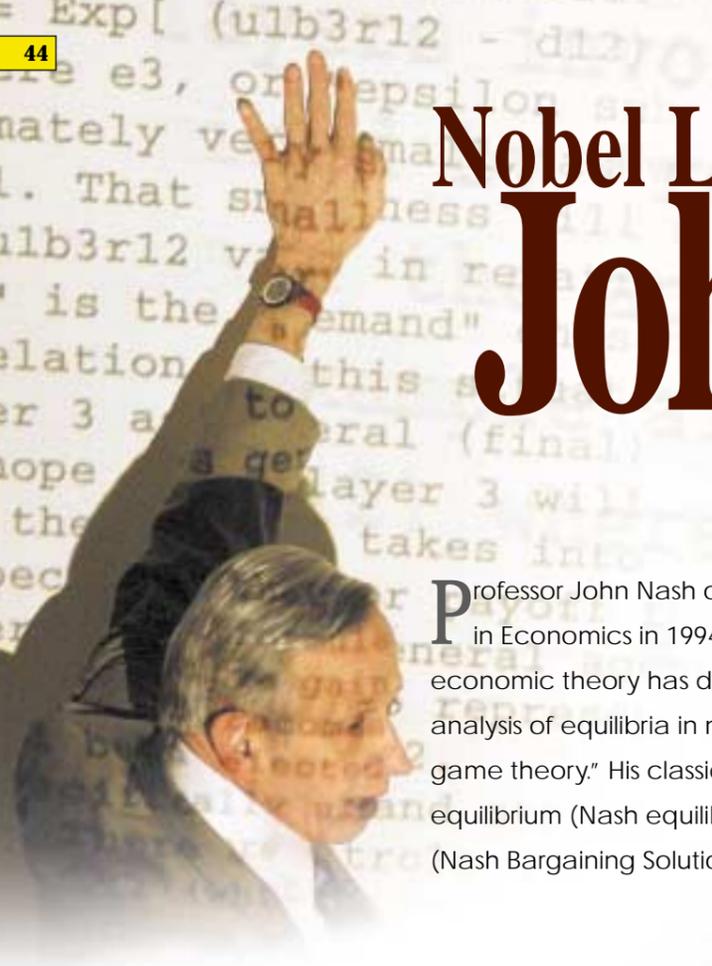


# Nobel Laureate John Nash at HKU



Professor John Nash of Princeton University was awarded the Nobel Prize in Economics in 1994, in recognition of "the profound effect on the way economic theory has developed in the last two decades, following his analysis of equilibria in non-cooperative games and other contributions to game theory." His classic works in game theory include the non-cooperative equilibrium (Nash equilibrium) and the co-operative bargaining solution (Nash Bargaining Solution) named after him.

Public Lecture  
"Game Theory"

General Education Forum  
"Dialogue with Students – Learning from Professor Nash's experiences"

Seminar on Game Theory  
"Retrospect and Prospects"

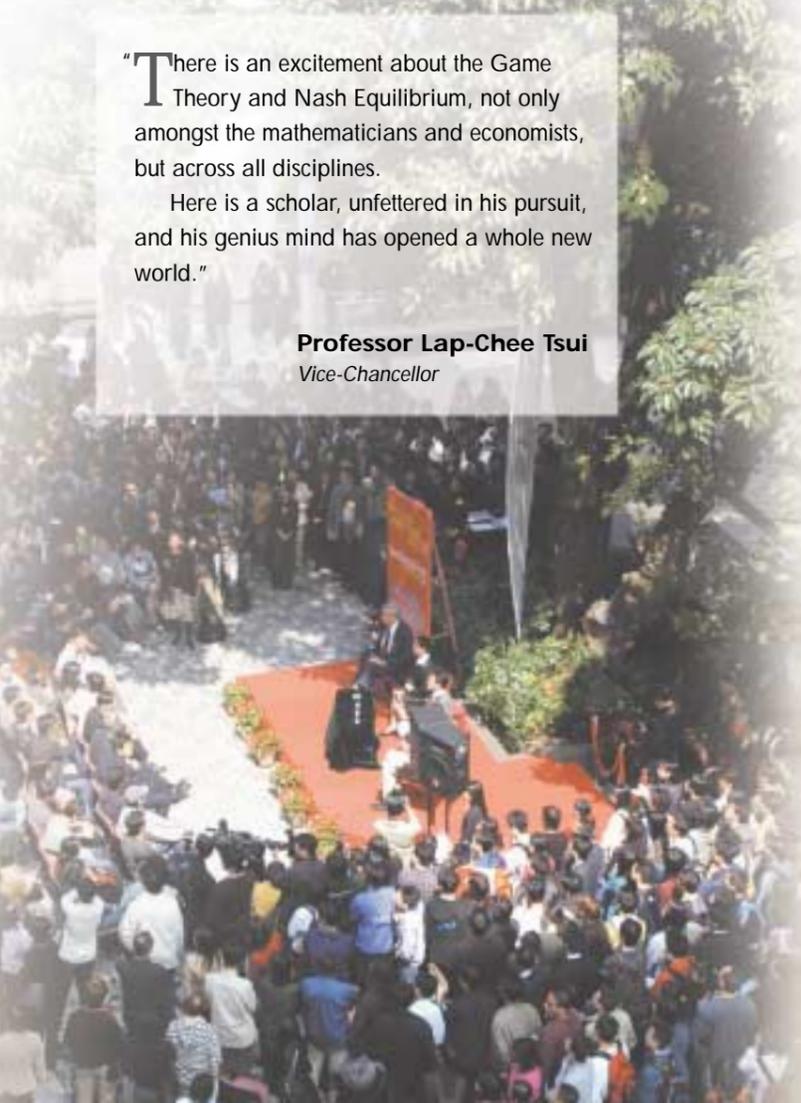


(From left) Professor John Nash, Professor Alain Haurie and Professor David Yeung at the Seminar

Co-organised by:  
K K Ho Foundation  
HKU Foundation for Educational Development & Research

"There is an excitement about the Game Theory and Nash Equilibrium, not only amongst the mathematicians and economists, but across all disciplines. Here is a scholar, unfettered in his pursuit, and his genius mind has opened a whole new world."

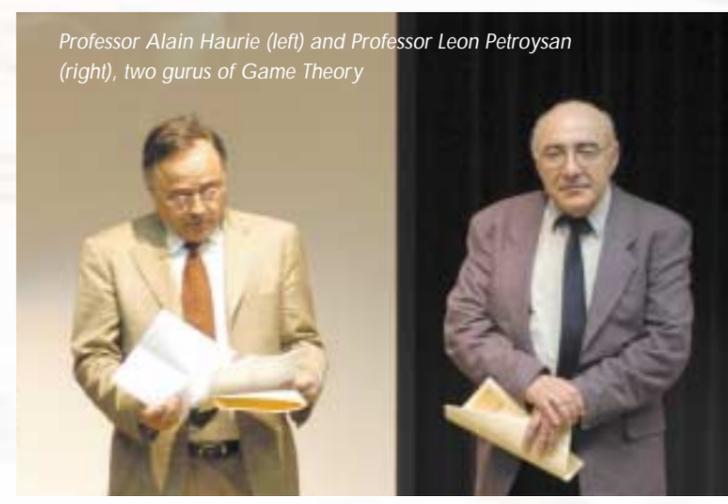
Professor Lap-Chee Tsui  
Vice-Chancellor



"Professor Nash belongs to an elite group that has fascinated people from all over the world. I feel honoured that a person of such importance would so generously provide us so much of his time.

For those who are familiar with his theories, this lecture will clearly allow for a more in-depth understanding; For those who are not so familiar, it is the perfect chance to gain exposure and who better to learn from? All in all, seeing Professor Nash speak in person allows us the rare opportunity to interact with true greatness."

Janie Wong  
BBA(Law) Year 3 student  
Student guide for  
Professor and Mrs Nash



Professor Alain Haurie (left) and Professor Leon Petrosyan (right), two gurus of Game Theory

Professor Haurie, "Hollywood gave an Oscar Award to Game Theory"

John Nash is a legend. Most people know him from "A Beautiful Mind", others know him because he was the Nobel Laureate in Economics in 1994. Those of us in Mathematics know him from his many astounding discoveries in the discipline, and wonder how this is ever possible. Game theory was the theme of the week, but there are many others, all at the very foundation of a variety of fields in Mathematics: partial differential equations, differential geometry, algebraic geometry. To be in the company of someone whose contributions are so profound is a real experience. His presence galvanised the academic community, and the city at large. Those in the department quickly started to discuss the universality of principles underlying Game Theory, its implications and applications to a lot of questions involving strategy, equilibrium and evolution. Some took up the task of explaining the basic principles to an audience of academics and students in other subjects, and to the general public through the media. Everyone talks about the Nash equilibrium. At least one should know that, to formulate John Nash's existence theorem of an equilibrium point in an n-person non-cooperative game, one has to introduce the notion of "mixed strategies". To understand the latter you have to know what "probability" is, and that brings you to a beautiful terrain of accessible mathematical ideas.....

John Nash represents a style. Pensive, straightforward and precise, he leaves the impression that every word is

measured, and yet genuine. Totally absorbed, the scientist completely identifies himself with his work. Having introduced the most basic axioms and principles into the theory, he works however on very concrete problems, and raises fundamental questions. He studies co-operation in games by introducing a procedure of election in non-cooperative n-person games, analyses thoroughly the formation of coalitions in a 3-person game in this light, and raises the challenging question as to how to assign values to players of the game. For those who wish to grasp how ideas evolve and questions arise in the minds of grandmasters, John Nash offers a model of an abstract thinker who builds his theory on solid foundations and real examples.

John Nash brings out the desire for knowledge in us. Learning is seldom a linear process. A lot of learning evolves from first impressions. For the student and the researcher who wish to see deep Mathematics at work, it was an exceptional opportunity to listen to John Nash together with a distinguished team of game theorists. Many were motivated to dig through whatever references that exist in the library; others are organising themselves to run a study group starting from the very foundations. We are blessed with the chance to learn from one of the best minds. May this only be the beginning!"

Professor Ngaiming Mok  
Chair of Mathematics, HKU