NUS’s 5th President
Professor Tan Eng Chye

The Department congratulates Professor Tan Eng Chye on his new appointment as NUS’s 5th President on 1 January 2018. He will be the 23rd leader to head Singapore’s oldest higher education institution, which traces its roots to a modest medical school founded in 1905. He currently serves as the University’s Deputy President (Academic Affairs) and Provost.

Prof Tan, who attended Raffles Institution (1974 to 1979), obtained his Bachelor in Mathematics (First Class Honours, 1985) at NUS and his PhD (1989) at Yale University. He joined NUS as a faculty member in the Department of Mathematics in 1985, as a Senior Tutor, and has held visiting positions at various universities overseas such as the Rutgers University, University of Washington at Seattle, University of California at Berkeley and University of Maryland, USA; Universities of Tokyo and Kyoto, Japan; as well as the Hong Kong University of Science and Technology.

Prof Tan’s research interests are in the Representation Theory of Lie Groups and Lie Algebras; and Invariant Theory and Algebraic Combinatorics. He has been invited to speak in numerous top conferences overseas, and has published more than 20 articles in top internationally refereed journals and conference proceedings. He has co-authored three books on mathematics, including a well-known graduate text on non-Abelian harmonic analysis.

Prof Tan is a passionate and award-winning educator. He was a pioneer architect of the current academic system in NUS, and has seeded many initiatives such as the Special Programme in Science, University Scholars Programme, University Town Residential College Programme, Grade-free Year, Technology-enhanced Education, etc.

He was recognised with the University Teaching Award for Innovative Teaching in 1998, and was President of the Singapore Mathematical Society (2001 to 2005) as well as the South East Asian Mathematical Society (2004 to 2005).

He is a Member of the Board of Directors of the Defence Science & Technology Agency (DSTA), Ministry of Defence; Board Member of Bizlink Centre, a social enterprise; and a Member of the Board of Governors of NUS High School of Mathematics and Science. He has also sat on the boards of the Agency for Science, Technology and Research (A*STAR), Defence Science Organisation (DSO) Laboratories, National Institute of Education, and the Infocomm Development Agency. He is a member of the International Advisory Council of the Southern University of Science and Technology in China.

Prof Tan received the Public Administration Medal (Gold) at Singapore’s National Day Awards in 2014 for his outstanding contributions to education.

Source: http://www.nus.edu.sg/about/management/37-tan-eng-chye
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President’s Science and Technology Award 2017

Professor Gan Wee Teck
Recipient of President’s Science Award

The President’s Science and Technology Awards (PSTA) are the highest honours bestowed on exceptional research scientists and engineers in Singapore for their excellent achievements in science and technology.

First established as the National Science and Technology Awards (NSTA) in 1987, the awards were elevated to the Presidential level in 2009. Given annually, the awards are presented to recognise and celebrate outstanding and invaluable contributions by individuals or teams to the research and development landscape in Singapore.

Prof Gan’s mathematical journey began in secondary school with an inspiring teacher, Mr Song Hoe Chye. Following a 19-year sojourn in the UK and US, he joined NUS in 2010. At that time, the Department of Mathematics at NUS Faculty of Science was already well known for its strength in representation theory. Prof Gan’s breakthrough results were achieved in a highly supportive environment comprising outstanding and passionate mathematicians, some of whom are students of Professor Roger Howe. Prof Gan’s achievements have helped to cement and enhance Singapore’s standing in an important area of mathematics.

Content to be finalized
We had a chat with Professor Toh to find out more about his interest in Mathematics and thoughts on winning the award.

**What or who inspired you to pursue a PhD in Mathematics?**

**What is the biggest challenge you have faced in your career?**

**What advice would you give to young aspiring mathematicians?**

**What are your thoughts on winning this prestigious award?**

*Content to be finalized*
Emeritus Prof Louis CHEN, Founding Director of NUS' Institute for Mathematical Sciences (IMS) was conferred the Distinguished Alumni Service Award 2017 for his service to NUS and contributions to the advancement of science. He built up IMS into one of the finest institutes in the world.

Prof Chen obtained his B.Sc. (Hons) in Mathematics from the University of Singapore (now National University of Singapore) in 1964 and his M.Sc. and Ph.D. in Statistics from Stanford University in 1969 and 1971, respectively. During his 43 years with the University, Prof Chen was Head of the Department of Mathematics.

Prof Chen carried out research work in various areas of probability theory and statistics, namely Stein's method, martingale theory, Poincaré inequalities, and in biomolecular sequence analysis in computational biology. In his pioneering work on Poisson approximation in 1975, he developed a method of calculating the probabilities of occurrences of dependent rare events. This method, which is now known as the Chen-Stein or Stein-Chen method, has found wide-ranging applications in many fields, with lasting impact in science and technology.

For his achievements in his field of study, he was appointed Tan Chin Tuan Centennial Professor (July 2006-December 2012).

In January 2013, he was appointed Distinguished Professor. He received the Emeritus Professorship award in April 2017, which is conferred to full professors on retirement in recognition of their sustained contributions in distinguished scholarship and service to the University. For his service to NUS, he was awarded the Distinguished Science Alumni Award in 2004, Public Administration Medal (Silver) in 2002.

Internationally, Prof Chen was the first Asian to be elected President of the Bernoulli Society for Mathematical Statistics and Probability (August 1997-July 1999). He received one of the highest honours when he became President of the IMS in August 2004, joining the ranks of the Institute's past presidents who are among the world's finest researchers in probability and statistics.

He was elected Fellow of the Third World Academy of Sciences in 2000 and conferred by the French Government of the title of Chevalier dans l'Ordre des Palmes Académiques in 2005 for his service to education. He also won the Excellence for Singapore Award in 1997, and the National Science and Technology Award in 1991.

Organised annually since 2005, the Enrichment Camp provides a platform for pre-university students to learn about Mathematics and its applications, beyond the realm of textbook mathematics. Through this camp, the department also hopes to inspire students to study mathematics at the university.

The half-day event was held on Saturday 19 August and comprised short talks on various topics. The camp kicked off with a welcome message and an introduction on the department’s undergraduate programmes by Prof Victor Tan, Assistant Head of Department.

There were three talks to cater to diverse interests, ranging from topology to data science. Prof Tan Ser Peow provided a peek to the topology and geometry of closed surfaces. Dr Wang Fei delved into how numbers are the most fundamental concepts of mathematics, and provided insight on how it takes centuries for the notion of numbers to be extended. Dr Vincent Tan ended the camp, sharing simple models of big datasets from a statistical perspective.

Interspersed with the three talks were screening of short videos on related areas and interactive quizzes to engage the participants. A total of 9 lucky participants walked away with attractive prizes. The camp was attended by more than 100 students.
Congratulations! Class of 2017!

The Commencement ceremony for class of 2017 was held on 9 July. The Department warmly congratulates our students who received the following university level medals & prizes in the Commencement 2017:

Undergraduate

- Medal of Excellence in Mathematics: LEE Si Ying
- Singapore Mathematical Society Medal and Prize: KHOR Shi-Jie
- Leong Teng Kiang Memorial Prize in Mathematics: Edmund CHAY Wei Liang
- Ho Family Prize: GAO Yuan
- The Ven Dr. D. D. Chelliah Gold Medal: GAN Nathaniel
- Lijen Industrial Development Medals: LEE Si Ying, GAO Yuan, Henry Jefferson Co MORCO
- Singapore National Academy of Sciences Award: CUI Tianyu

Graduate

- Louis Chen Hsiao Yun Best Dissertation Prize: QIAO Lei
- Best Graduate Researcher Award: WANG Liuquan
Staff Accolades

Congratulations to ... 

Professor ZHANG De-Qi and Professor ZHAO Gong Yun for receiving the 2017 National Day Awards - The Long Service Medal. The Singapore National Day Awards recognize various forms of merit and service to the nation.

Mdm Rubiah Bte TUKIMIN and Mdm SIM Choo Geok, Lilian on winning the Department Quality Service Award 2017.

Professor DINH Tien Cuong has been appointed as Provost’s Chair from 1 July 2017. Provost’s Chair appointments are for a three year period, and are made in recognition of the recipients’ outstanding and impactful scholarly accomplishments which are internationally acknowledged.