



鄭紹遠教授
Professor Shiu Yuen Cheng

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To an abstract mathematician such as Professor Shiu Yuen Cheng, nothing contains more beauty than an elegant theorem and the reasoning that leads up to it. Like a creative artist at an easel, the insights into life's mysteries uncovered through statements, axioms and proofs offer a wondrous key to knowing how and why the world works.

Professor Cheng has never wanted to keep his gift for fathoming these enigmas to himself. Instead, he has devoted a lifetime to drawing out simplicity from complexity and seeking to share the joys of such knowledge. Over the past 40 years, he has brought the wonders of calculus, differential geometry, and game theory, along with the core role that mathematics plays in social development, to the young, gifted or simply interested.

Introduced to Euclid at Pui Ching Middle School, the smitten youngster went on to study mathematics at the Chinese University of Hong Kong. Later, as a doctoral student at the University of California, Berkeley, he was supervised by world-renowned mathematician Shiing Shen Chern whom he deemed an outstanding example of a "true Chinese scholar".

It was a lesson Professor Cheng never forgot, dedicating his own career as an academic to showing how to achieve at the highest levels and be an honorable person. First NYU, Princeton and UCLA in the United States and his alma mater in Hong Kong were the beneficiaries of this perspective. Then in the mid-1990s, he joined HKUST. As a dynamic start-up university with a goal to be world class in research and education, and a specific focus on science and technology, it proved a perfect match.

Starting out at HKUST as Head of the Mathematics Department in 1996, Professor Cheng became Dean of Science in 2004, and later stepped up to serve as Acting Vice-President for Academic Affairs and Deputy to the President. In addition, he served on the University Court, Council and Senate. He was made a Chair Professor in 2005 and an Emeritus Professor in 2014.

Professor Cheng's research was of the highest order, devising novel theorems on Riemannian geometry, the study of curved surfaces, and being recognized for his

對於像鄭紹遠教授般的純數學家來說，世界上最引人入勝的莫過於一道精確簡潔的數學定理及其背後的推論。就如站在畫架前的畫家，數學家藉著命題、公理及證明洞察生命的奧妙，為解開人類對自然界運作的謎團留下線索。

鄭教授從未想過將自己的才華秘而不宣，亦不孤芳自賞，反而窮一生精力將數學理論化繁為簡，樂於與人分享數學之美及這門學問的樂趣。過去40年間，他致力培育後進，向對數學有熱誠、有天分的年輕人，傳授微積分、微分幾何及博弈理論的精妙之處，並讓他們明白數學在社會發展中的重要角色。

他就讀培正中學時，深受古希臘數學家歐幾里得啟蒙，因而選擇入讀香港中文大學數學系。及後，他負笈加州大學柏克萊分校攻讀博士課程，師承世界知名數學家陳省身。

鄭教授對老師推崇備至，譽其為「中國學者」的典範，所獲的教誨令他永誌不忘，決心成為德才雙馨的學者。他先後任教紐約大學、美國普林斯頓大學、加州大學洛杉磯分校及其香港母校。後來，他於九十年代中期加入香港科技大學。當時科大成立未幾，矢志成為著重科技、教研卓越的世界級學府，正好與鄭教授的理想不謀而合，讓他能盡展抱負。

1996年，他出任科大數學系系主任，至2004年成為理學院院長，其後更升任署理副校長（學術）。此外，他亦曾服務科大顧問委員會、校董會及教務委員會。他於2005年及2014年先後獲委任為講座教授及榮休教授。

鄭教授學術成就斐然，包括黎曼幾何和複幾何的研究，均達至頂尖水平，廣獲全球認許。他對拉普拉

contributions globally. In 2007, he was awarded the Chern Prize at the International Congress of Chinese Mathematicians for his exceptional achievements in the geometric study of eigenfunctions and eigenvalues of Laplacian. In 2012, he was elected a Fellow of the American Mathematical Society.

Regarded as brilliant by his peers, he was equally respected by those he taught, being voted one of HKUST's Best Ten Lecturers by students five years in a row. Despite differential geometry being one of the most difficult of all mathematical areas and Professor Cheng's eminence in his field, he was able and ready to bring his discipline down to earth. In 2008, he initiated and taught the Mathematics in Civilization common core course to show how often milestones in human history have been linked to the world of math.

A stream of further endeavors demonstrated his rare all-round capabilities as a communicator, organizer and advocate, as well as his willingness to contribute. These included helping to organize Saturday afternoon schools and summer camps at HKUST for talented school students and serving on the Board of Directors for the Hong Kong Academy for Gifted Education. He was also a longstanding and active member of the Committee on Mathematics Education for Hong Kong's Curriculum Development Council.

Prof Cheng has a sincere love for what he did and a wish to pass this on to the next generation. Both of his two sons benefited and went on to become mathematicians. Many others have been similarly inspired. As one colleague recalls, a trip to Professor Cheng's office, even when Dean, usually meant an encounter with a potential young Euclid from high school being patiently mentored in between meetings. The fortunate young people now are the front-runners at Tsinghua University where Professor Cheng has become Associate Director of the Yau Mathematical Sciences Center.

A favorite maxim is the Sung Dynasty saying, “涵養須用敬，進學在致知” - “Respect other people, continue to improve through learning”. Professor Cheng's work and life show he has certainly lived up to this. As a veritable scholar and gentleman, HKUST is proud to honor him today.

斯特徵函數及特徵值的幾何研究取得重大成就，因而於2007年榮獲世界華人數學家大會的「陳省身獎」。2012年，他獲選為美國數學學會會士。

除了獲同儕譽為傑出數學家，他亦深受學生愛戴，鄭教授曾連續五年獲選為科大「十大傑出講師」之一。微分幾何在數學世界中，是其中一個最深奧的領域，又是鄭教授的拿手好戲，他仍樂意深入淺出、不厭其煩地向大家闡釋這學問。2008年，他提出在大學核心課程中加入「人類文明中的數學」的課程，更親執教鞭，解釋人類歷史中眾多里程碑往往跟數學世界有莫大關連。

鄭教授能言善道，擅於與人交流，熱心栽培後進，推己及人。他積極推動教育發展，包括協助在科大組織為資優生而設的周六下午課程及夏令營，以及加入香港資優教育學苑董事局。他亦長期積極參與香港課程發展議會數學教育委員會的工作。

鄭教授一直對自己的工作充滿熱忱，希望能薪火相傳。他的兩名兒子均深受薰陶，並繼承其志，成為數學家，很多人亦同獲啟蒙。他一位同事憶述，縱然鄭教授出任理學院院長時公務相當繁忙，每當走進他的辦公室，還會看到他撥冗耐心指導一些年輕中學生，培育下一個數學泰斗歐幾里得。這些幸運兒現已為清華大學的高材生，而鄭教授則現出任該校丘成桐數學科學中心副主任。

他以宋代大儒程頤的格言「涵養須用敬，進學在致知」為座右銘，在工作及生活中確能奉行。鄭教授既是傑出學者，更屬謙謙君子，科大今天特地在此予以表揚。