DEPARTMENT OF MATHEMATICS

The 12th Epsilon Fund Award to Top Students

The Epsilon Fund Award was established in 2006 with donations from faculty and staff of the Department of Mathematics, and from the departmental fund to honor excellent students: undergraduates and postgraduates who excel in mathematical scholarship and research. More than sixty students have been awarded since its establishment. This year nine students receive the award and three students receive honorable mention. Each of them possesses a very high cumulative grade average, especially in mathematics subjects, and some have received multiple graduate program offers from famous universities.

Nine Mathematics students receive the Epsilon Fund Award

Two postgraduates:

1. Dong WANG (Year 4; PhD)

王東

四年級哲學博士(數學)研究生

Dong is now our year-four student pursuing the Ph.D. study and is under the supervision of Professor Xiao-ping WANG. He has been receiving Postgraduate Studentship since 2013. With superb teaching and research ability, Dong was presented the Best Teaching Award by the Department of Mathematics in 2015 and



the Research Excellence Award for Postgraduate Students by the School of Science in 2016. Prof. WANG compliments Dong on his excellent work on developing efficient threshold dynamic method for interface motion with applications to wetting on rough surface and image segmentation. His research papers are published in the Journal of Computational Physics and the Journal of Scientific Computing. To pursue advanced knowledge in the area of Applied Mathematics, Dong will soon be a Post-doc Fellow in the Department of Mathematics at the University of Utah after he graduates from HKUST.

2. Ling ZHOU (Year 2; MPhil) 周玲

二年級哲學碩士(數學)研究生

Ling is now our year-two student pursuing the MPhil study and is under the supervision of Professor Jing-song HUANG. She has been awarded Postgraduate Studentship when she started postgraduate study in HKUST. Ling has been studying a family of bounded linear operators, generalizing the Fourier transforms on square-



integrable functions on Euclidean spaces, in the framework of the oscillator representation (also called the Segal-Shale-Weil representation). She is able to describe these operators by applying basic theory of reductive dual pair correspondence (also called Howe correspondence) and determine these operators in comparison with the Fourier transforms under the periodicity condition. These results will appear in a research paper joint with her supervisor Professor HUANG, and are interesting from several perspectives in harmonic analysis, representation theory and their applications. Ling receives offers of the Ph.D. program in Mathematics from Purdue University, University of Virginia and Ohio State University. She determines to continue study in Ohio State.

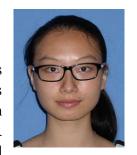
Seven undergraduates:

3. Xue BAI (Year 3; MAEC)

白 雪

三年級數學(數學與經濟)理學士本科生

Xue is one of the outstanding students in the program of Bachelor of Sciences Degree in Mathematics and Economics. Upon her entry at HKUST in 2014, she has been receiving the Dean's List Award in every academic semester. She has also been awarded several scholarships during her study in MAEC, which includes HKSAR Government Scholarship and The Hong Kong, China-APEC Scholarship and



Students' Academic Excellence. Xue also obtained First Prize in the China National High School Mathematics Contest 2013. Despite her hard work in studying, Xue also emphasizes "study-life balance" which might be one of the influential keys of her success.

4. Tsz Kiu Aaron CHOW (Year 3; IRE)

周子翹

三年級理學士(數學) - 國際科研本科生

Aaron is currently our third-year undergraduate student in the elite IRE (International Research Enrichment) program majoring in Mathematics (PMA track). He is a very outstanding student in both course works and research. Not only has Aaron completed the full series of math honors courses with excellent grades, he also has completed several graduate-level MATH courses including 5111, 6050E and 6050F,



and two graduate-level PHYS courses just as a third-year undergraduate student. In terms of research, Aaron has already co-authored two important journal papers: one with Professor Shengwang DU's team (PHYS) on quantum optics already published in Nature Communications, another with Professor Frederick FONG (MATH) on geometric flows which is currently under review by a reputable pure math journal. He is the First Runner-up of the 2017 Mr. Armin and Mrs. Lillian Kitchell UG Research Award. In the coming summer, he will go to the University of Chicago for an undergraduate research program (REU), and will also visit Stanford University as a visiting scholar where he will discuss research with Prof Richard Schoen (Wolf Prize Winner 2017) on geometric analysis and general relativity.

5. Do Kien HOANG (Year 2; PMA)

二年級理學士(數學) - 純粹數學高級班本科生

Do Kien is currently our second-year student pursuing the Bachelor of Science (Mathematics) Degree enrolling in the Pure Mathematics Advanced Track. His principle of "Always try to understand lectures from many different aspects of logic" brings four "A+" grades to Do Kien when he first attempted four 2000-4000 level of mathematics courses at the same time in last Fall semester. His excellent academic



achievement makes him the awardee of Dean's List Award and University Scholarship in every semester. Furthermore, Do Kien won the Silver Medal Award in the International Mathematical Olympiad 2013. With no fear to meet a challenge, Do Kien has enrolled into the S. S. Chern Class in Fall 2016 which covers mostly honors mathematical courses. His satisfactory performance in the S. S. Chern Class won him the Chern Class Scholarship.

6. Silin HUANG (Year 3; MAEC)

黄斯琳

三年級數學(數學與經濟)理學士本科生

Silin is our third-year student pursuing the Bachelor of Science Degree in Mathematics and Economics. She achieves extraordinary academic results and has never missed the Dean's List Award since she entered HKUST. Silin also gets several awards including the University Scholarship, Scholarship Scheme for



Continuing Undergraduate Students and Mr. Armin and Mrs. Lillian Kitchell Undergraduate Research Award (Finalist). In Fall 2016, Silin has joined the exchange program to University of California, Los Angeles and obtained the Dean's Honors List Award. Besides her academic achievement, Silin is also actively involved in extra-curricular activity by being the Social Leader in the SCI/NUCLEUS Social Service Team of the School of Science. She plans to go for further study in Economics.

7. Mikaela Angelia Chan UY (Year 4; CS)四年級理學士(數學) - 計算機科學本科生

Mikaela is in her final year of study pursuing the Bachelor of Science (Mathematics) Degree in Computer Science Track, and also taking Computer Science as the second major. Owing to Mikaela's outstanding academic result, she is presented with awards and scholarships including Dean's List Award, Targeted Scholarship Scheme under the HKSAR Government Scholarship Fund and HKSAR Government



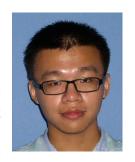
Scholarship Fund – Talent Development Scholarship. She has joined the exchange program to Swiss Federal Institute of Technology Zurich in Spring 2015-16 and has been awarded Lee Hysan Foundation Exchange Scholarship. In the same year, Mikaela has taken part in the HKUST Robotics Team and her team won the Asia Championship in Hong Kong and placed the 3rd Overall in Canada for the Regional and International MATE Underwater Robotics Competition. For the future plan, she will pursue a master degree in Computer Science study.

8. Yifeng YANG (Year 3; SF)

杨一峰

三年級理學士(數學) - 統計及金融數學本科生

Yifeng is undoubtedly a distinguished student in the program of Bachelor of Science (Mathematics) Degree in Statistics and Financial Mathematics Track, and also taking Business and Information Technology as minor programs. Achieving academic excellence brings Yifeng the Dean's List Award and Ho & Ho's Foundation



Scholarship during his study at HKUST. He has joined the exchange program to University of California, Berkeley in Fall 2016 and got HKUST Alumni Endowment Fund – Exchange Scholarship for Non-Local Students. Yifeng shares the essential factors of his achievement which are to do revision right after class and always make a plan in studying.

9. Yuan YANG (Year 3; MAEC) 杨 苑

三年級數學(數學與經濟)理學士本科生

Yuan is one of the remarkable students in the program of Bachelor of Sciences Degree in Mathematics and Economics. Due to her impressive academic result, she is bestowed with awards and scholarships including Dean's List Award and Ho & Ho's Foundation Scholarship. Yuan is currently joining the exchange program in the



National University of Singapore and is awarded the HKUST Alumni Endowment Fund – Exchange Scholarship for Non-local Students. Being always curious about knowledge, Yuan is enthusiastic in exploring the Mathematics and Economics field of study and she is considering further study in Financial Mathematics/Statistics or Applied Mathematics/Economics programs.

Three Mathematics students receive Honorable Mention

- 1. Elfarouk Yasser Farouk M. A. HARB (UG Year 2; PMA) left photo
- 2. Xiang ZHANG 張翔
 (UG Year 4; CS) middle photo
- 3. Yifeng ZHANG 張逸楓 (UG Year 4; PMA) right photo





