

Participants of Research Colloquium for Science Undergraduate Students

2020-21

Name	Curriculum	Year	Project Title	Supervisor
Cai Yuxi	BSc (4)	4	Application of Deep Learning: Sentiment Analysis on COVID-19 Vaccine Tweets	Prof Guodong Li, Department of Statistics & Actuarial Science
Chan Alistair Kai Chak	BSc (4)	4	Combination therapy in nanoparticles encapsulating curcumin against Alzheimer's Disease	Dr Aviva S F Chow & Dr Dong-Yan Jin, School of Biomedical Sciences & Department Of Pharmacology And Pharmacy
Chan Lok Yin	BSc (4)	4	Total and free sugars level and the main types of sugars used in local and imported pre-packaged foods and beverages sold in Hong Kong	Dr Jimmy C Y Louie, School of Biological Sciences
Chan Timothy	BSc (4)	4	Detecting alternative promoter usage in hepatocellular carcinoma and nasopharyngeal carcinoma using 5'-biased sequencing data	Dr Joshua W K Ho, School of Biomedical Sciences
Cheung Chin Shek	BSc (4)	4	Methods in the study of intestinal microbiota: in vitro colon model and in vivo samples	Dr Hani El-Nezami, School of Biological Sciences
Du Zhixu	BSc (4)	4	Sign Language Recognition	Prof Michael K P Ng, Department of Mathematics
Fung Cheuk Ying	BSc (4)	4	Reconstructing last-century nutrient conditions off west Greenland using stable isotopes in crustose coralline algae	Dr Christelle A Not, Department of Earth Sciences
Gan Dailin	BSc (4)	4	Deep Learning with Application in Artificial Intelligence	Prof Guosheng Yin, Department of Statistics & Actuarial Science
Gupta Saumya	BSc (4)	4	Testing the effect of ocean acidification on the camouflaging behavior of sea urchin <i>Salmacis sphaeroides</i>	Dr Bayden Russell, School of Biological Sciences
Kim Sehong	BSc (4)	4	Unravelling the Effect of Maph-1.3 on ALM Touch Receptor Neurons of <i>Caenorhabditis elegans</i>	Dr Chaogu Zheng, School of Biological Sciences
Lai Wenjing	BSc (4)	4	Understanding the molecular mechanism of congenital scoliosis	Dr Bo Gao, School of Biomedical Sciences
Li Kam Yun	BSc (4)	4	Mesoporous chiral metal organic framework (CMOF) for heterogenous asymmetric photocatalyst	Dr Jian He, Department of Chemistry
Lim Hui Yuan	BSc (4)	4	Modelling Alzheimer's and Parkinson's Disease in <i>C. Elegans</i>	Dr Chaogu Zheng, School of Biological Sciences
Lou Yuchen	BSc (4)	3	First order algorithms for optimization problems in data science	Prof Xiaoming Yuan, Department of Mathematics
Szeto Dei Men	BSc (4)	4	Investigating the role of DLC-il and the molecular regulation of its expression in embryonic chick spinal motor neurons using CRISPR/Cas9 genome-editing approach	Dr Martin C H Cheung, School of Biomedical Sciences
Tsang Hiu Yu	BSc (4)	4	Ectoparasites of bats in Hong Kong and specificity of host-parasite interaction	Dr Simon Y W Sin, School of Biological Sciences
Tse Wing Man	BSc (4)	4	Effects of melatonin on neuropathological changes in amygdala-prefrontal cortex of 5XFAD mouse model of Alzheimer's Disease	Dr Lee Wei Lim, School of Biomedical Sciences
Wong Jolene	BSc (4)	4	Microplastic ingestion related to feeding habits of cormorants in Deep Bay	Dr Christelle A Not & Dr Caroline Dingle, Department of Earth Sciences
Wong Yeuk Hang Portia	BSc (4)	4	Tracing pangolin trade origins and revealing illegal trafficking networks through next-generation sequencing	Dr Timothy C Bonebrake, School of Biological Sciences

Yip Ka Hei Anson	BSc (4)	5	Assessing Functional Connectivity of Urban Green Spaces for Butterflies in Highly Urbanized Landscape	Dr Timothy C Bonebrake, School of Biological Sciences
Yu Nicole	BSc (4)	4	Starvation and thermal consequences for resource allocation and reproduction in a polyphenic butterfly	Dr Timothy C Bonebrake, School of Biological Sciences
Zhang Xiaotian	BSc (4)	4	Identification and Characterization of Vangl2 Interactome Using Proximity-dependent Biotinylation	Dr Bo Gao, School of Biomedical Sciences
Zhang Zheng	BSc (4)	4	The impact of COVID-19 epidemic on the conservation status of pangolins	Dr Timothy C Bonebrake, School of Biological Sciences
Zheng Yahuan	BSc(ActuarSc) (4)	4	Distribution of Zeros of a Random Polynomial	Prof Jeff Jianfeng Yao, Department of Statistics & Actuarial Science

2019-20

Name	Curriculum	Year	Project Title	Supervisor
Cheng Yujia	BSc (4)	4	Subgroup Analysis with Application to Clinical Trials	Dr Jinfeng Xu, Department of Statistics and Actuarial Science
Chiu Pak Wing	BSc (4)	4	Cooperativity of Irx3/5 with its potential partners in genome-wide transcriptional regulation during embryonic mouse inner ear development	Prof Mai Har Sham, School of Biomedical Sciences
Lam Si Yu	BSc (4)	4	Tracking Siberian Rubythroats and Yellow-breasted Buntings with Stable Isotopes	Dr Caroline Dingle, School of Biological Sciences
Lee Kwun Chak	BSc (4)	4	Potentially biogenic carbon in Wallace assemblage, Southeast Manitoba, Canada	Dr Joseph Michalski, Department of Earth Sciences
Leung Hoi Kit Matthew	BSc (4)	4	Effects of Particulate Yeast Beta-glucan on Blood Adiposity Parameters and Bile Acids Profile in HFD-fed Mice	Dr Hani El-Nezami, School of Biological Sciences
Liang Shuang	BSc (4)	4	On the L2 estimate and its application	Prof Ngai Ming Mok, Department of Mathematics
Liu Chen	BSc (4)	4	Efficient Unpaired Image Dehazing with Cyclic Perceptual-Depth Supervision	Prof Guosheng Yin, Department of Statistics and Actuarial Science
Payong Jae Elise Landayan	BSc (4)	3	Using hybrid bilayer membrane modified electrodes as a lipid layer permeation assay platform	Dr Edmund C M Tse, Department of Chemistry
Shao Xiaoman	BSc (4)	3	Investigation of DOCK7's Role in Melanoma Development	Dr Martin C H Cheung, School of Biomedical Sciences
Sun Xianlin	BSc(ActuarSc) (4)	4	A General Framework for Post-model selection Inference with Bootstrapping and its Applications	Prof Stephen M S Lee, Department of Statistics and Actuarial Science
Tang Xun	BSc (4)	3	Demonstration of generic Quantum controllability under QAOA setting	Dr Zhiwen Zhang, Department of Mathematics
Tao Yufeng	BSc (4)	3	Combining Technical Trading Rules: A Recurrent Reinforcement Learning Approach	Dr Philip L H Yu, Department of Statistics and Actuarial Science
Tsang Kin Ming	BSc (4)	4	Representation by weighted m-gonal numbers and weighted squares	Dr Benjamin R Kane, Department of Mathematics
Wong Hong Tsun	BSc (4)	4	Dark Energy as Torsion in General Relativity	Dr Jereny J L Lim, Department of Physics
Wong Yin Pok	BSc (4)	4	Synthesis of Luminescent Metal Complexes and their Functional Studies	Prof Vivian W W Yam, Department of Chemistry
Xiao Xinyu	BSc (4)	4	How do the thermal microcracks affect the cracking behaviour in granite under tensile loading?	Dr Louis N Y Wong, Department of Earth Sciences
Xu Hongting	BSc (4)	4	ISM1 in Murine Hematopoiesis	Prof Zhongjun Zhou, School of Biomedical Sciences
Xu Wan	BSc (4)	4	Elucidating the Role of SOX10 in Neuroblastoma	Dr Martin C H Cheung, School of Biomedical Sciences

2018-19

Name	Curriculum	Year	Project Title	Supervisor
Gu Jiacheng	BSc (4)	4	The Tumor-Suppressor Effect of the Long Non-Coding RNA RP11 in Hepatocellular Carcinoma	Dr Jiangwen Zhang, School of Biological Sciences
Han Wendi	BSc (4)	4	Spectral Ratio for Positive Matrices	Dr Guangyue Han, Department of Mathematics
Ho Sik Yin	BSc (4)	4	Optimization of guide RNA scaffold design for multiplexed gene editing	Dr Alan S L Wong, School of Biomedical Sciences
Kwan Hiu Lam Rachel	BSc (4)	4	Role of TRPC1-induced Ca ²⁺ -Signaling in Neuromuscular Synapse Development	Dr Chi Wai Lee, School of Biomedical Sciences
Lai Siu Lun Michael	BSc (4)	4	Visualization of neural pathways in Parkinson's disease by transparent brain and neural tracing	Dr Raymond C C Chang, School of Biomedical Sciences
Lam Siu Ling	BSc (4)	5	Modular forms and product formulas	Dr Benjamin R Kane, Department of Mathematics
Lee Tak Wang Terence	BSc (4)	4	Influenza A virus PB1-F2 cytotoxic motif promotes self aggregation to activate NLRP3 inflammasome	Prof Dong-Yan Jin, School of Biomedical Sciences
Leung Tsz Kin Calvin	BSc (4)	4	Oviposition preference and niche partitioning in Hong Kong stag beetles (Coleoptera: Lucanidae)	Dr Timothy C Bonebrake, School of Biological Sciences
Leung Yee Man	BSc (4)	4	Evolutionary reduction in the plastome of mycoheterotrophic <i>Thismia hongkongensis</i>	Prof Richard M K Saunders, School of Biological Sciences
Ng Man Hoi	BSc (4)	4	Ion-exchange Leaching Solutions on Product Quality in Rare Earth Recovery	Prof Meifu Zhou, Department of Earth Sciences
Pei Yining	BSc (4)	4	Copulas in Risk Management	Dr Ka Chun Cheung, Department of Statistics & Actuarial Science
Shukla Yash Sanjaykumar	BSc (4)	4	Assessing the activity of an autonomous and continuous production of a function and synthetic push-pull motif	Dr Julian A Tanner, School of Biomedical Sciences
Su Zehao	BSc (4)	4	Test for Parent-of-origin Effects on the X-chromosome	Prof Tony W K Fung, Department of Statistics & Actuarial Science
Wan Lok Yee	BSc (4)	4	Preparation of recombinant protein of adiponectin in <i>E. coli</i> and testing of its bioactivity in cell lines with adiponectin receptor expression and its potential effects on promoter activation of pituitary hormones	Prof Anderson O L Wong, School of Biological Sciences
Wang Chuwen	BSc (4)	4	Uniruled Projective varieties	Prof Ngai Ming Mok, Department of Mathematics
Woo Vanessa Sin Tung	BSc (4)	3	Synthetic Studies Towards Functionalized Catenanes	Dr Ho Yu Au-Yeung, Department of Chemistry
Yeung Chun Hei	BSc (4)	4	What causes brightness "anomalies" in gravitationally lensed quasars?	Dr Jeremy J L Lim, Department of Physics
Zhao Ziwei	BSc (4)	4	Home Sweet Home ---- Territoriality of Male and Female Oriental Magpie Robin (<i>Copsychus saularis</i>) in Breeding and Non-breeding Seasons	Dr Caroline E Dingle, School of Biological Sciences

2017-18

Name	Curriculum	Year	Project Title	Supervisor
Chan Chun Ngai	BSc(4)	4	The analysis of the sediments from Huangqihai	Dr Zhonghui Liu, Department of Earth Sciences
Chan Ka Kit	BSc(4)	4	Fracture Toughness of Hong Kong Granite - Numerical Simulation based on an improved grain-based model	Dr Louis N Y Wong, Department of Earth Sciences
Chen Yuming	BSc(4)	4	Computing effective diffusivity of stochastic flows using the multilevel Monte Carlo method	Dr Zhiwen Zhang, Department of Mathematics
Cheung Man Him	BSc(4)	4	Elucidating the Role of Dlc1 β in Motor Neuron Development	Dr Martin C H Cheung, School of Biomedical Sciences
Chu Ka Chi	BSc(4)	4	Differential Gene Expression in Mouse Notochord to Nucleus Pulposus Transition	Prof Kathryn S E Cheah, School of Biomedical Sciences
Fan Kwok Lung	BSc(4)	3	Uncovering the Nature of Fermi LAT Unassociated Gamma-ray Sources	Dr Stephen C Y Ng, Department of Physics; Prof Pablo Miguel SAZ Parkinson, Department of Physics
Fung Lok Hin	BSc(4)	4	Impact of Climate Change on the Phenology of Migratory Birds in Hong Kong	Dr Timothy C Bonebrake & Dr Caroline E Dingle, Department of Earth Sciences
Gu Haotian	BSc(4)	4	Efficient Numerical methods to Solve G-equations using Proper Orthogonal Decomposition	Dr Zhiwen Zhang, Department of Mathematics
Lee Lai Yee	BSc(4)	4	The Study of Brightest Cluster Galaxy Alignment in 14 CLASH Clusters	Dr Jeremy J L Lim, Department of Physics
Ling Yuet Fung	BSc(4)	4	Upper-ocean stratification in the polar North Atlantic and its impact on deep-water ventilation during past interglacials	Dr Benoit Thibodeau, Department of Earth Sciences
Man Pui Hei Marcus	BSc(4)	4	Modulation of the cGAS-STING Pathway by MERS-CoV	Prof Dong-Yan Jin, School of Biomedical Sciences
Ng John Joson Quimpo	BSc(4)	4	A Metal-based Biomimetic Strategy for the Development of Analyte Responsive Fluorescent Probes	Dr Ho Yu Au-Yeung, Department of Chemistry
Ng Ka Wai Patrick	BSc(4)	4	Search for Heavy Higgs Bosons at ATLAS Using Machine Learning Based Methods	Dr Yanjun Tu, Department of Physics
Ng Un I	BSc(4)	4	Creating an Artificial Metalloenzyme by Metal Incorporation into a Natural Protein	Prof Chi Ming Che, Department of Chemistry
Ng Yu Hin Jay	BSc(4)	4	Microstructural investigation on Hong Kong granite - A quantitative analysis method using petrographic microscope	Dr Louis N Y Wong, Department of Earth Sciences
Poh Wei Church	BSc(4)	4	Design, Synthesis, Characterisation and Photophysical Properties of Cyclometalated Platinum(II) Complexes and Their Application Studies as Organic Resistive Memories	Prof Vivian W W Yam, Department of Chemistry

Wang Jen-chieh	BSc(4)	4	Studies on the effects of stereochemistry on (4+3) cycloaddition to synthesize perhydroazulenes	Prof Pauline Chiu, Department of Chemistry
Wang Jianian	BSc(4)	4	Filtered Historical Simulation method on Linear GARCH model	Dr Guodong Li, Department of Statistics & Actuarial Science
Wang Jingxuan	BSc(4)	4	Computer Age Statistical Inference	Prof Jeff J F Yao, Department of Statistics & Actuarial Science
Yan Junran	BSc(4)	4	The role of centromere and kinetochore proteins in anoxia-induced suspended animation and recovery in <i>S. cerevisiae</i>	Dr Karen W Y Yuen, School of Biological Sciences
Zeng Ji	BSc(4)	3	L2 Estimates of d-bar Operator on Complex Manifolds	Prof Ngai Ming Mok, Department of Mathematics
Zhou Ruiyi	BSc(4)	4	Adapting Scalable Correlated Electronic Structure Theory to Born-Oppenheimer Molecular Dynamics Simulations	Dr Jun Yang, Department of Chemistry

2016-17

Name	Curriculum	Year	Project Title	Supervisor
Chu Wing Tung	BSc(4)	4	Comparison of the carbon metabolism of wild-type and transgenic Arabidopsis with fast-growing phenotype	Dr Wallace B L Lim, School of Biological Sciences
Dai Wei	BSc(4)	5	Laboratory Astrochemistry: Catalytic Conversion of Methanol to Hydrocarbon Compounds over Dust Grains	Prof Allan S C Cheung, Department of Chemistry
Ho Julian Xi Wei	BSc(4)	5	Supplementation of oleic acid increases contractility of human engineered cardiac tissues	Dr Kwok Ming Yao & Dr Wendy W Y Wong, School of Biomedical Sciences
Ho Ngai Hei Ernest	BSc(4)	4	Marginal Sea for Plastic Cleanup: (Micro)plastic Characterisation & Patterns	Dr Christelle A Not, Department of Earth Sciences
Lai Siu Kit Vincent	BSc(4)	4	Correlation of joint spacing and rock texture of granites in Hong Kong	Dr Louis N Y Wong, Department of Earth Sciences
Li Shuangning	BSc(ActuarSc)(4)	4	The Sample Size Required in Importance Sampling	Prof Jeff J F Yao, Department of Statistics and Actuarial Science
Lo In	BSc(4)	4	Effect of coffee pre-feeding on postprandial glucose and lipid metabolism	Dr Jimmy C Y Louie, School of Biological Sciences
Lui Jeffrey	BSc(4)	4	FoxD3 directs gliogenesis of neural crest progenitors through post-translational regulation of Ngn2 stability	Prof Kathryn S E Cheah, School of Biomedical Sciences
Man Jason Yin Hei	BSc(4)	4	A Biomimetic Approach to the Development of Ascorbate Selective Fluorescent Probe for Biological Imaging	Dr Ho Yu Au-Yeung, Department of Chemistry
Ni Haozheng	BSc(4)	4	Modelling Discrete-Valued Time Series	Dr Guodong Li, Department of Statistics and Actuarial Science
Rabbani Mashiat	BSc(4)	4	Evaluation of Nucleoside Analogues as Potential Anti-Cancer Drugs	Prof Alice S T Wong, School of Biological Sciences
Tse Yuen Cheong	BSc(4)	4	Design, Synthesis and Photophysical Study of Cyclometallated N ⁴ C ⁴ N Alkynylplatinum(II) Complexes	Prof Vivian W W Yam, Department of Chemistry
Wong Thomas Hin Fung	BSc(4)	4	Chemical Biology of genipin's Anticancer Activities	Prof Chi Ming Che, Department of Chemistry
Wong Wing Yan	BSc(4)	4	Interference Study on ttbb Final State by Monte Carlo Event Generation for a Heavy Higgs Search at the ATLAS Experiment at the LHC	Dr Yanjun Tu, Department of Physics
Yang Ruoxuan	BSc(4)	4	Representations of integers by sums of polygonal numbers	Dr Benjamin R Kane, Department of Mathematics
Yau Yu Yan	BSc(4)	4	Environmental implication on livestock production	Dr Christelle A Not, Department of Earth Sciences
Zhang Zhiqian	BSc(4)	4	CRISPR/Cas9 mediated cloning of Epstein-Barr virus strain from cell line derived from local Nasopharyngeal Carcinoma patient sample	Prof Dong-Yan Jin, School of Biomedical Sciences

2015-16

Name	Curriculum	Year	Project Title	Supervisor
Fan Ruolin	BSc(4)	4	Exploring chondro-osteoblastic lineage differentiation and the role of hypertrophic chondrocyte	Prof Kathryn S E Cheah, School of Biomedical Sciences
Guo Fengyi	BSc(4)	4	Bird Dialects: Geographic Song Divergence of the Common Tailorbird (<i>Orthotomus sutorius</i>) in Asia	Dr Timothy C Bonebrake, School of Biological Sciences; Dr Caroline E Dingle, Department of Earth Sciences
Hassan Ayon Ahmed	BSc(4)	4	Fucosylation of Sialyl Lewis X is essential for P-selectin mediated tumor-mesothelial adhesion in ovarian cancer metastasis	Prof Alice S T Wong, School of Biological Sciences
Husain Abdullah	BSc(4)	4	Bio-molecular Fluorescence Complementation of Split GFP as a reporter for G-protein coupled receptor dimerization	Prof Billy K C Chow, School of Biological Sciences
Koo Ho Tan	BSc(ActuarSc)(3)	3	A Study on Interest Rate Models	Dr Kam Pui Wat, Department of Statistics and Actuarial Science
Lam Ting Chak	BSc(4)	4	Effects of chitosan nano-fiber on derivation of mature Schwann cells from bone marrow stromal cells	Prof Daisy K Y Shum, School of Biomedical Sciences
Lei Wa Yan	BSc(4)	4	Analysis of joint spacing distribution in tuff in Hong Kong	Dr Louis N Y Wong, Department of Earth Sciences
Leung Yi Lok Enoch	BSc(4)	4	On the Predictions of Early Galaxy Formation from Quantum Wave Dark Matter in the Hubble Frontier Fields	Dr Jeremy J L Lim, Department of Physics
Liu Yangdongling	BSc(4)	4	Synthesis, Characterization and Photophysical Study of Face-to-Face Dinuclear Platinum(II) Alkynyl Phosphine Complexes	Prof Vivian W W Yam, Department of Chemistry
Luo Di	BSc(4)	4	Improving Density Functional Theory with Artificial Neural Network	Prof Guanhua Chen, Department of Chemistry; Dr Shizhong Zhang, Department of Physics
Mak Ka Ho Jason	BSc(4)	4	Determining the regulation mechanism of centromeric transcription in <i>Saccharomyces cerevisiae</i>	Dr Karen W Y Yuen, School of Biological Sciences
Sun Chenyue	BSc(4)	4	Phosphorescent Tungsten(VI) cis-Dioxo complexes	Prof Chi Ming Che, Department of Chemistry
Wang Qinan	BSc(4)	4	A multi-bit Quantum Key Distribution Scheme	Prof Hoi Fung Chau, Department of Physics
Wang Zhongmin	BSc(4)	4	Treatment of Epstein-Barr Virus Infection in Nasopharyngeal Carcinoma Cells by CRISPR/Cas9 Targeting of viral genes	Prof Dong-Yan Jin, School of Biomedical Sciences
Wen Boya	BSc(4)	4	Fermat Type Functional Equations	Prof Tuen Wai Ng, Department of Mathematics
Wu Teng	BSc(3)	4	Hybrid confidence region based on empirical distribution function	Prof Stephen M S Lee, Department of Statistics and Actuarial Science
Xiong Lingyun	BSc(4)	4	Functional Role of hnRNP A1 on Alternative Splicing in Hepatocellular Carcinomas (HCC)	Dr Kin Hang Kok, Department of Microbiology; Dr Kwok Ming Yao, School of Biomedical Sciences
Yau Yu Tung	BSc(ActuarSc)(3)	3	Spectral Analysis of Large Random Graphs	Prof Jeff J F Yao, Department of Statistics and Actuarial Science

Yiu Sum Yee Joyce	BSc(4)	4	The geochemistry of the Vijayan anatectic melts, eastern Sri Lanka	Dr Suchin Chang, Department of Earth Sciences
Yuen Suet Wai	BSc(4)	4	Artificial light environments alter prey attraction outcomes of orb weaver spiders in Hong Kong	Dr Timothy C Bonebrake, School of Biological Sciences
Zhang Yongquan	BSc(4)	4	Complex Manifolds	Prof Ngaiming Mok, Department of Mathematics
Zhang Zhe	BSc(4)	4	Crosstalk between Sufu and RBPJ in Mammalian Ventral Hindbrain Neurogenesis	Prof Mai Har Sham, School of Biomedical Sciences

2014-15

Name	Curriculum	Year	Project Title	Supervisor
Cai Weixin	BSc(3)	3	Buffered Autoregressive Model with Exogenous Variables	Dr Philip L H Yu, Department of Statistics and Actuarial Science
Chan Hau Sun	BSc(3)	3	Intramolecular (4+3) cycloadditions of aziridiny enolsilanes	Prof Pauline Chiu, Department of Chemistry
Chan Ho Wang	BSc(3)	3	Anammox Bacteria in Animal System	Dr Jidong Gu, School of Biological Sciences
Chan Hok Fung	BSc(3)	5	Physiologically-relevant doses of UVA exposure alters human skin keratinocytes growth	Dr Jetty C Y Lee, School of Biological Sciences
Chan Ka Ying Tiffany	BSc(3)	3	Aptamers for Malaria Diagnosis	Dr Julian A Tanner, Department of Biochemistry
Chan Ming Yan	BSc(3)	3	Implement the Light Profile of Galaxies in Construction of Gravitational Lensing Field	Dr Jeremy J L Lim, Department of Physics
Cheng Tsz Fung	BSc(3)	3	Roles of BART microRNAs in Epstein-Barr virus-induced epithelial transformation	Prof Dong-Yan Jin, Department of Biochemistry
Hu Chenchen	BSc(3)	3	Data Visualization and Infographics	Dr Philip L H Yu, Department of Statistics and Actuarial Science
Lee Ka Ming	BSc(4)	3	Hidden Mathematics in Daily Life: Packing Problem and Its Related Topics	Prof Wai Ki Ching, Department of Mathematics
Leung Pui Shan	BSc(3)	3	A Less Parametric Mass Distribution Model For MACS0647	Dr Jeremy J L Lim, Department of Physics
Qian Zhaozhi	BSc(3)	3	A New Weighted Distance-based Ranking Model with Geometrical Interpretation	Dr Philip L H Yu, Department of Statistics and Actuarial Science
Tsui Wing Sum Regine	BSc(3)	3	Zircon U-Pb Age and Geochemistry of the Habahe Batholith in the Chinese Altai, NW China and their tectonic implications	Prof Min Sun, Department of Earth Sciences
Zhang Hongyuan	BSc(3)	3	Role of Laminin Proteins in Planarian Stem Cell Maintenance and Regeneration	Prof Danny Chan, Department of Biochemistry

2013-14

Name	Curriculum	Year	Project Title	Supervisor
Chan Kin Ming & Cheng Ka Hei	BSc(3)	3	Physics of Very Degenerate Atomic Gases	Dr Shizhong Zhang, Department of Physics
Chan Pak Chung	BSc(3)	3	Identifying the Planarian homologs of FOXM1 and FOXO1 transcription factors	Dr Kwok Ming Yao, Department of Biochemistry
Cheung Pak Hin Hinson	BSc(3)	3	Characterization of liver-targeting recombinant AAV for gene delivery in mice	Prof Dong Yan Jin, Department of Biochemistry
Fung King Cheong	BSc(3)	3	Generalizations of the factorial function	Prof Kai Man Tsang, Department of Mathematics
Ho Chau Ha	BSc(3)	3	Transcriptome wide identification of viral miRNA targets using PAR-CLIP	Dr Kin Hang Kok, Department of Biochemistry
Lam Tsz Fung	BSc(3)	3	Investigation of the role of PAX6 in Alzheimer's disease	Dr You Qiang Song, Department of Biochemistry
Li Yu	BSc(3)	3	Cohomology Groups with Applications in Complex Geometry	Prof Ngaiming Mok, Department of Mathematics
Luo Jie	BSc(3)	3	Hunting for CCOs	Dr Stephen C Y Ng, Department of Physics
Miao Yiqiao	BSc(3)	3	Discussions on the Inefficiency of the AIC When Selecting Models from Separate Families, and Modifications	Prof Kai Wang Ng, Department of Statistics and Actuarial Science
Pang Wenqi	BSc(3)	3	The roles of Suppressor of fused in mammalian craniofacial development	Prof Mai Har Sham Department of Biochemistry
Rodríguez Caro Helena	Exchange	1	Differential expression pattern of Cdo and Boc in inner ear development	Dr Elaine Y M Wong, Department of Biochemistry
Sun Lianyi	BSc(ActuarSc)(3)	3	Consensus Clustering in Community Detection: Its Enhancement and Application	Dr Jeff J F Yao, Department of Statistics and Actuarial Science
Tang Sze Lok Marco	BSc(3)	3	Development of fluorescence polarization techniques to probe DNA aptamer-mediated molecular recognition	Dr Julian A Tanner, Department of Biochemistry
Wang Linsheng	BSc(3)	3	Characterization of the Circadian Rhythms in Premature Aging Cells	Dr Zhongjun Zhou , Department of Biochemistry
Wong Ching Kit	BSc(3)	2	Is the geomagnetic field reversing now?	Prof Lung Sang Chan, Department of Earth Sciences
Wong Mo Dick	BSc(ActuarSc)(3)	3	Large Dimensional Analysis of Perturbed Wishart Process	Dr Jeff J F Yao, Department of Statistics and Actuarial Science
Yang Shihao	BSc(ActuarSc)(3)	3	Valuing Guaranteed Minimum Death Benefits	Prof Hailiang Yang, Department of Statistics and Actuarial Science
Yang Yingrui	BSc(3)	3	Approximation of Ruin Probability in Infinite Time under Classical Risk Process	Dr Eric C K Cheung, Department of Statistics and Actuarial Science
Yeung Fung Chun	BSc(3)	3	Correlation between Earth tides and earthquake occurrence	Prof Lung Sang Chan, Department of Earth Sciences
Zhang Qichen	BSc(3)	3	UreG Protein from Helicobacter pylori as A Nickel-Binding Chaperone and A GTPase	Prof Hongzhe Sun, Department of Chemistry

2012-13

Name	Curriculum	Year	Project Title	Supervisor
Chai Wai Yeeng	BSc(3)	3	Effect of Bisphenol A (BPA) on both ER α - positive and ER α - negative ovarian cancer cells	Dr A S T Wong, School of Biological Sciences
Cheng Ka Hei	BSc(3)	2	Generalizations of the factorial function	Prof K M Tsang, Department of Mathematics
Chiu Yat Sing Risheng	BSc(3)	3	U-Pb zircon age and geochemical as constrains on the emplacement time of andesites from Kluwih, East Jave, Indonesia	Prof J Malpas, Department of Earth Sciences
Chow Tai Cheong	BSc(3)	3	Role of PTPN21 in Promoting STAT5 Transcriptional Activity via ErbB4 Receptor	Dr Y Q Song, Department of Biochemistry
Fung Sin Yee	BSc(3)	3	Construction of a NS1-mutated influenza A virus by reverse genetics	Prof D Y Jin, Department of Biochemistry
Hui Tin Yan	BSc(3)	3	Central-place foraging of sand bubbler crab Scopimera intermedia	Prof Gray Williams, School of Biological Sciences
Hung Oi Ying	BSc(3)	3	Test of FOXM1 as an enhancer of iPSC reprogramming	Dr K M Yao, Department of Biochemistry
Kung Chung Yee	BSc(3)	3	Construction of a miR-BART-deficient Epstein Barr virus by recombineering	Prof D Y Jin, Department of Biochemistry
Kwong Hiu Tung	BSc(3)	3	Geochemical Signature of Pore Water from Core Sample and its Implications on Palaeo-environment in Cangzhou, China	Prof J J Jiao, Department of Earth Sciences
Lai Cheuk Hei	BSc(3)	2	Pathogenesis of Influenza viruses	Dr W Y Chan, Department of Pathology; Dr C W Chan, School of Public Health

Lam Chi Chung	BSc(3)	3	The Complex Filamentary Nebula at the center of the Perseus Cluster	Dr J J L Lim, Department of Physics
Leung Wing Sze, Amy	BSc(3)	3	Taxonomic and phylogenetic status of <i>Desmos dumosus</i> (Annonaceae)	Prof R M K Saunders, School of Biological Sciences
Leung Ying Chi	BSc(3)	3	Detections of cosmic-rays and neutrinos in underground laboratories	Dr J K C Leung & Dr J C S Pun, Department of Physics
Li Shengchao	BSc(3)	3	Detections of cosmic-rays and neutrinos in underground laboratories	Dr J K C Leung & Dr J C S Pun, Department of Physics
Li Yan Hei	BSc(3)	3	Geochronological dating and geochemical analysis of Tuen Mun Formation and tectonic implication	Prof M F Zhou, Department of Earth Sciences
Lin Tsen-yuan	BSc(3)	3	Quantum computing	Prof Z D Wang, Department of Physics
Lo Hoi Ki Katy	BSc(3)	3	The sedimentary environment and palaeoecology of the Wonosari Formation, East Java as inferred by petrographic thin-sections	Prof J Malpas, Department of Earth Sciences
Lo Wing Fung	BSc(3)	3	Songs in the city: The effects of urban noise on bird song.	Dr Caroline Dingle, School of Biological Sciences
Ma Yik Ki	BSc(3)	3	The Radio Magnetospheres of Chemically-Peculiar Bp/Ap Stars	Dr J J L Lim, Department of Physics
Peng Jun	BSc(3)	2	Calculus of variation	Prof W S Cheung, Department of Mathematics
Song Yifan	BSc(3)	3	Physics of Very Degenerate Atomic Gases	Dr S Z Zhang, Department of Physics
Tam Cheuk Yan	BSc(3)	3	An assessment on the suitability of organic carbon isotopes for sea-level reconstructions	Prof Y Q Zong, Department of Earth Sciences
Tang Yunfan	BSc(3)	3	Backward Stochastic Differential Equations in Option Pricing	Prof H Yang, Department of Statistics and Actuarial Science
Tse Man Nok	BSc(3)	3	Co-regulation of <i>Irx3</i> and <i>Irx5</i> by <i>Lmx1a</i> transcription factor".	Dr M H Sham, Department of Biochemistry
Wan Kai Tin Leon	BSc(3)	3	Rotational Modulation in the Radio Emission of Active Late-Type Dwarf Stars: Active Stellar Longitudes or Not?	Dr J J L Lim, Department of Physics
Wong Ka Wai	BSc(3)	3	c.-14C>T mutation in IFITM5 alters the onset and rate of in vitro bone mineralization: Implication for osteogenesis imperfect (type V)	Dr D Chan, Department of Biochemistry
Wong Yin Wai	BSc(3)	3	NMMIIA is a functional component in normal epithelial cell organization in both 2D and 3D environment	Dr J D Huang, Department of Biochemistry
Wu Qihang	BSc(3)	3	Chronological constraints on the polyphase deformation of Chinese Altai: Implications for tectonic evolution	Prof M Sun, Department of Earth Sciences
Yin Grace Wing Ie	BSc(3)	3	Identification of extracellular factors that determine cancer cell survival under hypoxic condition	Dr N S Wong, Department of Biochemistry
Yuen Chun Kit	BSc(3)	3	Gene targeting in cultured mammalian cells using TALEN technology	Dr K H Kok, Department of Biochemistry

Zhang Shixiao	BSc(3)	3	Simulation Study of Finite-sample Performance of Maximum Likelihood Estimator	Prof K W Ng, Department of Statistics and Actuarial Science
Zheng Yao	BSc(ActuarSc)(3)	3	Applications of Nonlinear Time Series Models	Prof W K Li, Department of Statistics and Actuarial Science Department of Statistics and Actuarial Science

2011-12

Name	Curriculum	Year	Project Title	Supervisor
Chau Tsz Kit	BSc(3)	3	Long-term radio observation of young and rapidly-rotating late-type dwarf star AB doradus	Dr J J L Lim, Department of Physics
Cheng Chi Lok Kevin	BSc(3)	3	Characterization of whole gut bacterial community in oreiental cockroach	Prof F C C Leung, School of Biological Sciences
Chong Wing Fung	BSc(3)	3	Copulas and comonotonicity in Statistics and Risk Management	Dr K C Cheung, Department of Statistics and Actuarial Science
Ho Sze Hang	BSc(3)	3	Nedd9 expression and its potential role in mediating neural crest delamination induced by Sox9	Dr M Cheung, Department of Biochemistry
Ji Hao	BSc(3)	3	Properties of depth functions as measure of representativeness	Prof S M S Lee, Department of Statistics and Actuarial Science
Kong Kar Lun	BSc(3)	3	Elementary methods in prime number theory	Prof K M Tsang, Department of Mathematics
Lai Tsz Pui	BSc(3)	3	Probing new and specific interactions between medicinally relevant metal complexes and proteins using X-ray crystallography	Prof H Z Sun, Department of Chemistry
Lam Hing Ha	BSc(3)	3	Optical dating of anthropological site in Ding Cun, ShanXi	Dr S H Li, Department of Earth Sciences
Lau Matthew Chung Hin	BSc(3)	2	Elementary methods in prime number theory	Prof K M Tsang, Department of Mathematics
Leung Man Him	BSc(3)	3	Development of Fluorophore labeled bacterial machinery for in situ monitoring of oxygen levels and gene expression in mammalian host	Dr A Yan, School of Biological Sciences
Li Xinyu	BSc(3)	3	Condensate dark matter star	Prof K S Cheng, Department of Physics
Li Zhangyun	BSc(3)	2	Copulas in risk management	Dr K C Cheung, Department of Statistics and Actuarial Science
Lin Tsen-yuan	BSc(3)	2	Detections of cosmic-rays and neutrinos in underground laboratory	Dr J K C Leung & Dr J C S Pun, Department of Physics
Ma Sophia Ka Yan	BSc(3)	3	The role of autophagy in planarian regeneration and degrowth	Dr D Chan, Department of Biochemistry
Mung Kwan Long	BSc(3)	3	The effects of hypoxia on unfolded protein response signaling pathways in cancer cells	Dr N S Wong, Department of Biochemistry

Pak Chol Min	BSc(3)	3	Transparent Conducting Films: Ga-doped ZnO on Sapphire Substrates by RF Magnetron Sputtering	Dr F C C Ling, Department of Physics
Song Yifan	BSc(3)	2	Detections of cosmic-rays in underground laboratories	Dr J K C Leung & Dr J C S Pun, Department of Physics
Tsang Man Yin	BSc(3)	3	The early stages of sulphate crystallization	Dr K Lemke, Department of Earth Sciences
Tso Tsz Ying	BSc(3)	3	Magnetic properties of sediment of Ha Pak Nai, Yuen Long, Hong Kong	Prof L S Chan, Department of Earth Sciences
Wong Kam Hung	BSc(3)	3	Geology and molybdeniteRe-Os geochronology of the Baishizhang porphyry Mo deposit, SE China	Prof M F Zhou, Department of Earth Sciences
Wong Kwok Fai	BSc(3)	3	Approximations for Ruin Probabilities in Insurance Risk Theory	Dr E C K Cheung, Department of Statistics and Actuarial Science
Wong Yat Sing	BSc(3)	3	Laser induced fluorescence spectroscopy of platinum boride	Prof A S C Cheung, Department of Chemistry
Wu Xiyuan	BSc(3)	2	Insurance Risk	Prof H Yang, Department of Statistics and Actuarial Science

2010-11

Name	Curriculum	Year	Project Title	Supervisor
Chao Wai Min Cherie	BSc(3)	3	Does geldanamycin activate Unfolded Protein Response (UPR) in cancer cells?	Dr N S Wong, Department of Biochemistry
Chau Wayne C	BSc(3)	2	Observational and Analytical Studies of the Photometric Light Curves of Variable Stars	Dr J C S Pun, Department of Physics
Cheung Ka Chun Arthur	BSc(3)	3	Geometrical study of jointed columns in Hong Kong	Prof L S Chan, Department of Earth Sciences
Chiu Ka Yi	BSc(3)	3	Pos Selim Landslide in Malaysia	Prof A Malone, Department of Earth Sciences
Chiu Man Hung	BSc(3)	3	Telomeres, Telomerase and Tumorigenesis	Dr K M Yao, Department of Biochemistry
Chong Tsz Yat Ian	BSc(3)	3	Mutational Studies on protein binding sites of UCRNA VINC/NEAT J	Prof F C C Leung, School of Biological Sciences
Chong Tsz Yat Ian	BSc(3)	3	Conflicting signals: A new approach to understanding neural crest migration	Dr M H Sham, Department of Biochemistry
Hui Man Ning	BSc(3)	3	Regulation of Sox9 expression in the developing chick neural tube by the Sonic Hedgehog and Retinoic acid signaling	Dr M Cheung, Department of Biochemistry
Ko Man Ying	BSc(3)	4	Synthesis and Photo-physical Properties of Platinum (II) Complexes with Oligo(ortho-phenyleneethynylene) Bridging Ligands	Prof C M Che, Department of Chemistry
Kwok Yan Ho	BSc(3)	3	Current density distribution in carbon nanotube based electronic devices	Prof G H Chen, Department of Chemistry

Li Wing Yi	BSc(3)	3	Coronal Magnetic Activity of the Fast-Rotating Solar-type Star AB Doradus	Dr J J L Lim, Department of Physics
Li Yuen Tsun	BSc(3)	3	Climate and environmental changes in Tibet Plateau in the past 2000 years	Dr Z Liu & Dr C Zhao, Department of Earth Sciences
Ma Jialiu	Exchange	1	Metal and Life	Dr Ligana Hu, Department of Biochemistry
Mau Chun Lok	BSc(3)	3	"Let's do some correct statistics..." - What do we mean by that?	Prof S M S Lee, Department of Statistics and Actuarial Science
Shi Yuan	BSc(3)	2	Mathematical Problems in Quantum Mechanics	Dr S Wu, Department of Mathematics
So Kwok Ming	BSc(3)	3	Homoleptic Metal Organochalcogenides As A Single-source Precursor of M(E)x: Preparation and Reactivity Study on Nanostructured RuSe ₂ for Chemoselective Catalytic Reduction	Prof C M Che, Department of Chemistry
So Lok Hin	BSc(3)	3	Amphibians and Reptiles in Hong Kong Catchwaters	Dr N E Karraker, School of Biological Sciences
Tang Chan Estela	BSc(3)	3	Targeted Therapy Design	Dr G Yin, Department of Statistics and Actuarial Science
Tang Kwok Hei Eric	BSc(3)	2	Comparative analysis of the host's immune responses against 3 different genotypes of PRRSV	Prof F C C Leung, School of Biological Sciences
Wong Ka Tat	BSc(3)	3	Coronal Magnetic Activity of the Fast-Rotating Solar-type Star PZ Telescopium	Dr J J L Lim, Department of Physics
Wong Wai Chung	BSc(3)	3	What is in a drop of seawater? A mass spectrometric study of ion clusters in natural electrolyte solutions	Dr K Lemke, Department of Earth Sciences
Wu Hung Kit	BSc(3)	2	Analysing the Dark Accelerator - HESS J1745-303 with Fermi-LAT	Prof K S Cheng, Department of Physics
Wu Man Ho	BSc(3)	3	Gamma-ray Emissions from Galactic Globular Clusters as seen by Fermi LAT	Prof K S Cheng, Department of Physics
Yuen Yan Ling	BSc(3)	3	A Population Study of the Hong Kong Newt	Dr N E Karraker, School of Biological Sciences

2009-10

Name	Curriculum	Year	Project Title	Supervisor
Chan Chi Chung	BSc(3)	3	Coronal magnetic activity at the divide between partially and fully convective star	Dr J J L Lim, Department of Physics
Hsu Siu Fai	BSc(3)	3	Supersymmetric Quantum Mechanics and the Witten Index	Dr S Wu, Department of Mathematics
Lam Suk Hang	BSc(3)	3	Spintronics and novel topological states of matter	Prof S Q Shen, Department of Physics
Ren Yi Cooper	BSc(3)	3	Climate Change and larval behavior: Substrate Preference by Barnacle Larvae in future acidified ocean	Dr V Thiyagarajan, School of Biological Sciences
Tsang Tsz Ho	BSc(3)	3	Estimation of surface wind speed over heterogeneous terrain using boundary layer theory and downscaling technique	Dr C C Ling, Department of Physics

2008-09

Name	Curriculum	Year	Project Title	Supervisor
Chan Ka Lok	BSc(3)	3	Preparation of oil-in-water emulsion by ultrasonication for direct ICP-MS metal-in-oil analysis	Dr W T Chan, Department of Chemistry
Chan Yuk Lun	BSc(3)	3	Sox9 SUMOylation and Signaling Molecules are involved in controlling Neural Crest Delamination	Dr M C H Cheung, Department of Biochemistry
Ho Chi Wang John	BSc(3)	3	Molecular Cloning and Characterization of Chicken Galanin Receptors	Prof F C Leung, School of Biological Sciences
Lam Yan Ting	BSc(3)	3	Quantum Information	Dr H F Chau, Department of Physics
Lam Yuen Man	BSc(3)	3	Probing the protein environmental factors important for the effector binding in E. coli global transcription factor FNR	Dr A Yan, School of Biological Sciences
Ng Kam To	BSc(3)	3	Sox9 function is regulated by SUMOylation in avian neural crest development	Dr M C H Cheung, Department of Biochemistry
So Ming Lai	BSc(3)	3	Seismogrammic analysis of earthquakes in Hong Kong Region	Prof L S Chan, Department of Earth Sciences
Sung Ka Chun	BSc(3)	3	Higher Rank Numerical Ranges	Dr N K Tsing, Department of Mathematics
Wang Xuan	BSc(3)	3	Molecular evolution of porcine reproductive and respiratory syndrome virus Nsp2 variants during serial passage in MARC-145 cells	Prof F C Leung, School of Biological Sciences
Yu Hoi Fung	BSc(3)	3	Pulsar glitches	Prof K S Cheng, Department of Physics

2007-08

Name	Curriculum	Year	Project Title	Supervisor
Chan Hoi Shan	BSc(3)	3	Petrology and Geochemistry of mantle xenoliths from Syria	Prof J G Malpas, Department of Earth Sciences
Chau Ka Hung Bolton	BSc(3)	3	Does Sumoylation affect Sox9 functions in neural crest development	Dr M C H Cheung, Department of Biochemistry
Chen Hoi Lam	BSc(3)	3	Cloning and characterization of sprouty proteins in chicken	Prof F C C Leung, School of Biological Sciences
Cheung Chung Ching	BSc(3)	4	Finite Geometry	Dr P P W Wong, Department of Mathematics
Fu Shing	BSc(ActuarSc)(3)	3	Extreme Value Theory and Applications	Prof W K Li, Department of Statistics & Actuarial Science
Ho Koon Sing	BSc(3)	3	ICP MS Measurement of Metals in Single-Cell Algae	Dr W T Chan, Department of Chemistry
Kwong Hiu Jing	BSc(3)	3	Paleomagnetic study of Linzizong volcanic rocks, Linzhou, southern Tibet: implications for positioning Paleogene Eurasia's southern edge before and after India collision	Dr J R Ali, Department of Earth Sciences

Lam Wai Ting	BSc(3)	3	Polymer solar cells	Dr A B Djurišić, Department of Physics
Lau An Yi Annie	BSc(3)	3	Barchan dunes in the middle reaches of Yarlung Zangbo, Southern Tibet	Dr A Switzer, Department of Earth Sciences
Leung Hoi Tik Alvin	BSc(3)	3	Differential Equations and Mathematical Biology	Prof W S Cheung, Department of Mathematics
Leung Kwun Lun	BSc(3)	3	Geochemistry of Alege-dayi ophiolite from the Altai, Xinjiang, China and its tectonic implications	Prof M Sun, Department of Earth Sciences
Li Hiu Lung	BSc(3)	3	Theory of spintronics	Dr S Q Shen, Department of Physics
Li Long	BSc(3)	3	Riemann surfaces and / or complex manifolds	Prof N Mok, Department of Mathematics
Mak Ho Yan Queenie	BSc(3)	3	Cellular response to ER-stress signals in early development	Dr M C H Cheung, Department of Biochemistry
Ng Wai Pan	BSc(3)	3	Kannaviou Formation of Cyprus and its relationship with the Troodos Complex	Prof J G Malpas, Department of Earth Sciences
Pak Ho	BSc(3)	3	Characterization of the human matrix metalloproteinase 9 by p7056K: role of GATA-4, GATA-5, and GATA-6	Dr A S T Wong, School of Biological Sciences
Pun Ying Anna	BSc(3)	2	Projective Geometry and Modern Algebra	Dr P P W Wong, Department of Mathematics
Tam Wan Ting	BSc(3)	3	Cloning and Characterization of the Putative Receptor (Heat shock protein 90) of Infectious Bursal Disease Virus	Prof F C C Leung, School of Biological Sciences
Tang Yun Sang	BSc(3)	3	Study of antimicrobial peptides by NMR spectroscopy	Dr K H Sze, Department of Chemistry
Wong Kingsley Jin-ho	BSc(3)	3	Spatio-temporal variations in diversity and abundance of benthic crustaceans in subtropical Hong Kong waters	Dr K M Y Leung, School of Biological Sciences