

# Department of Statistics 統計系 The Chinese University of Hong Kong 香港中文大學

## **NEWSLETTER**

中大統訊

Issue 2 December

2007

二零零七年十二月 第二期

#### MESSAGE FROM THE CHAIRMAN

Dear Friends and Alumni:

Time really flies and it gives me great pleasure to share this second issue of the Department of Statistics Newsletter with you. The year 2006-2007 has been a fruitful year not only for the department, but also for the university.

In the pedagogical front, the department has gone through several curriculum revisions across different programs. In particular, the undergraduate program in Statistics conducted its first program review during this summer. Useful and constructive comments were received from the review panel as well as from students and alumni. I would like to take this opportunity to thank those alumni who took the time and efforts in lieu of their busy schedules to participate in this endeavor. Please be assured that your input would be taken seriously. As soliciting comments from alumni constitutes an important element in program development, starting next year, the department coordinating with the Centre for Learning Enhancement and Research (CLEAR), will be sending out a graduate survey questionnaire to all of our graduates. I encourage everyone to spend a moment to complete the survey online. The information gathered will be instrumental to our future success.

There have also been changes in the human resources front in 2006-2007. Professor Thomas Chun-Man Lee joined the department in January 2007. A new project coordinator for the MSc program in Statistics, Ms. Monica In Lo, joined the department in July 2007. Two overseas scholars are currently visiting the department during the fall semester of 2007: Professor Liang Peng from Georgia Institute of Technology and Dr. Tiong-Wee Lim of National University of Singapore. Both of them are distinguished scholars in statistics and risk management and are offering undergraduate and postgraduate courses for the department. In addition, Ms. Grace Chi-Ha Chan has been promoted to the rank of Executive Officer since July and Dr. Siu-Hung Cheung has been promoted to Professor since August. Congratulations to both of them for their successes!

With concerted efforts, ties with overseas institutions become stronger. Seventeen seminars were launched by internationally renowned scholars during the academic year of 2006-2007. Nine students went on overseas exchange programs in one form or another during the same period. In particular, with the help of Professor Thomas Lee and colleagues from Colorado State University, two students participated in the summer research program with the Statistics Department of Colorado State University. A glimpse of many of these exciting experiences can be found under the student activity section of this issue.

This Newletter will provide you with the latest news of the department, including recent and upcoming activities and honors of staff, students and alumni alike. I sincerely hope you enjoy this issue and please share with us your feedback.

In this issue

Message from the Chairman

Content page

Department's News

Admission Highlights
Appointments
New Books

3

Department Activities -Seminars Student Activities -

Exchange Programme

8

Address

Alumni Networking
Change of
Correspondence

Sincerely

Ngai Hang Chan

Chairman, Department of Statistics
Professor of Statistics

13°

## **Department's News**

Formal Programme Review of Statistics Undergraduate Programme

In June 2007, the Department conducted a formal programme review for the enhancement of teaching and learning environment. We would like to extend our gratitude to the student and alumni panels for their opinions and valuable feedback which contribute to the development of the Programme.

### **Exemplary Teaching Award**



Dr. Hoi-ying Wong received the Exemplary Teaching Award of the Faculty of Science in 2006-07.



### Admission Highlights

The admission results in 2007/08 of both Statistics and RMS undergraduate programmes continue to improve healthily. The RMS undergraduate programme continues to reap the cream of applicants in the Faculty of Science. The self-financed master programmes received many applications, proven to be welcomed by the public. We highlighted the results below:

- 53 and 26 students have been received in Statistics and Risk Management Science programmes respectively,
- 6 students have been received in MPhil. in Statistics programme
- 3 students have been received in MPhil. in RMS programme
- 29 students have been received in MSc. in Data Science and Business Statistics programme
- 22 students have been received in MSc. in RMS programme
- 5 students have been received in Ph.D. in Statistics programme

## **Appointments**

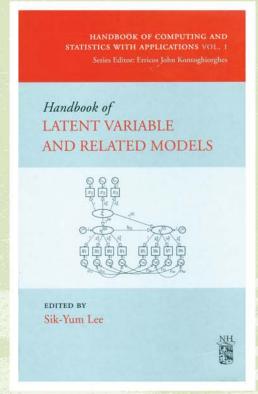
Two scholars have joined the Department as visiting scholar during the fall semester of 2007.

Dr. Peng Liang - Dr. Peng received his B.S. in Mathematics from Zhejiang University, M.S. in Probability in Peking University and Ph.D. in Probability and Mathematical Statistics in Erasmus University Rotterdam.

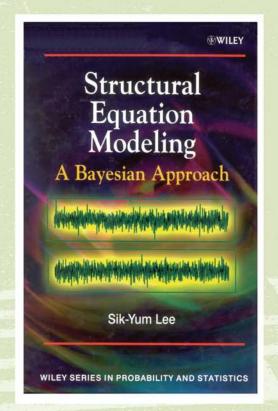
Dr. Lim Tiong-wee - Dr. Lim received his B.Sc. in Imperial College of Science and Technology, M.S. and Ph.D. in Stanford University. His research interests are optimal stopping, options and other derivative securities.

Miss Monica In LO have been serving as Project Coordinator II since mid-July 2007. She oversees the administration of MSc. in Data Science and Business Statistics programme.

#### **New Books**



Handbook of Latent Variable and Related Models



Structural Equation Modeling - A Bayesian Approach

6423

## **Department Activities** Seminars

The department collaborates with universities worldwide. Regular seminars are held by renowned statisticians. In 2006-07, the department launched various seminars:

	Date	Speaker	Title
	July 3, 2007	Professor Kenneth Cheung Department of Biostatistics, Mailman School of Public Health, Columbia University, U.S.A.	Dose-finding Principles in Phase I Clinical Trials: Coherence & Rigidity
	April 24, 2007	Professor Long S. Chiu Institute of Space and Earth Information Science, Chinese University of Hong Kong	Estimating Rainfall from Space
	April 17, 2007	Professor David A. van Dyk Department of Statistics, University of California, Irvine, U.S.A.	Spectral Analysis of Faint Astronomical Objects: Bayesian Modeling, Computation, and Inference
	March 6, 2007	Professor Wenbo V. Li Department of Mathematical Sciences, University of Delaware, U.S.A.	Small Value Phenomena in Probability and Statistics
	March 5, 2007	Professor Paul Embrechts Department of Mathematics, ETH Zurich, Switzerland	A Pillar 1 Approach to Operational Risk: Utopia or Not
	February 13, 2007	Professor Tze Leung Lai Department of Statistics, Stanford University, U.S.A.	A Hidden Markov Modeling Approach To Multiple Change-Points
	January 30, 2007	Professor Yuedong Wang Department of Statistics and Applied Probability, University of California, Santa Barbara, U.S.A.	Semi-parametric Nonlinear Mixed Effects Models and Their Applications
	January 16, 2007	Professor Jia-An Yan Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, China	New Risk Measures Based on Choquet Integrals
	December 19, 2006	Professor Zhiliang YING Department of Statistics, Columbia University, U.S.A.	Regression Analysis with Semiparametric Transformation Models
	December 12, 2006	Professor Tiong-Wee LIM Department of Statistics and Applied Probability, National University of Singapore, Singapore	A New Approach to Singular Stochastic Control in Optimal Hedging and Investment-Consumption under Transaction Costs
STATE AND ADDRESS OF	December 5, 2006	Professor Zhi-Ming MA Institute of Applied Mathematics, Chinese Academy of Sciences, China	Coverage of Wireless Networks and Stein-Chen Methods
	November 28, 2006	Professor Jin-Chuan Duan Manulife Chair in Financial Services, Rotman School of Management, University of Toronto, Canada	How Frequently Does the Stock Price Jump? An Analysis of High-Frequency Data with Microstructure Noises
	November 24, 2006	Professor Edward H.S. Ip Biostatistics and Social Sciences & Health Policy, School of Medicine, Wake Forest University, U.S.A.	Extended Latent Class Models and Developmental Trajectory Analysis
	November 21, 2006	Professor Feifang Hu Department of Statistics and Division of Biostatistics and Epidemiology, Department of Health Evaluation Science, School of Medicine, University of Virginia, U.S.A.	Adaptive Randomization in Clinical Trials
177.62	November 10, 2006	Professor Andrew Carverhill Department of Economics and Finance, University of Hong Kong	The Smirk in the S&P500 Futures Options Prices: A Linearized Factor Analysis
100	September 1, 2006	Professor Robert J. Adler Technion, Israel	The Brain, the Universe, and Random Processes on Manifolds
3 3	August 24, 2006	Professor Cun-Hui Zhang Department of Statistics, Rutgers University, U.S.A.	Empirical Bayes and FDR

#### Student Activities 學生活動

## Chiu Kung Yat RMS Year 4

Having come back to Hong Kong for a week, I feel that Denmark is gradually fading away from my heart. Sometimes I acted like Danes, thought like Danes and felt like Danes. Suddenly, however, it seems that I have woken up from a wonderful dream and have come back to reality. I do value my exchange experience in Demark very much

I remembered that I encountered many problems in Denmark when I first arrived there, and these unpleasant experiences had once caused me dislike Denmark. The most frustrating problem was to find an accommodation. Because the university had neither campus nor hostel, I had to rent a room for myself. Unfortunately, Copenhagen is one of the places with highest rental rates but least rooms in the world. It caused me much effort to find a room there. I had moved for three times. My first accommodation was in a hotel, followed by a room with unreasonable rent. After that, I rented a room owned by a cunning landlord who cheated my money. I could not settle down in Copenhagen until the second semester began. I lived with a very nice 26-year-old landlord and we became friends. Since then, my life in Copenhagen had completely changed and I could experience the real Danish life finally.

Life is always full of challenges. In addition to the accommodation problem, I have to adapt to the weather in Denmark which is very different from that in Hong Kong. In November, the duration of sunshine decreases to 5 hours only with cloudy, windy and rainy or snowy days. I could rarely experience sunshine in winter. However, I needed a lot of light. Having not seen sunshine for a whole month, I could not bear the weather anymore. I, therefore, decided to travel to the Southern Europe during winter. I was not in Denmark during the winter except two weeks when I needed to attend the examinations. I traveled towards the south, first Germany, followed by Austria and Italy. Maybe someone would think I did something ridiculous. However, I did enjoy my long trip with traveling at day time and studying at night. This was how I escaped from the coldest and darkest period of Copenhagen of the year.

Being in Denmark for a year, I have developed a sense of belonging to it. I lived like Danes, shared its glory and missed it when I traveled to other places. Because of a sense of belonging, I stopped traveling in the second semester. Copenhagen is not a boring place. Endless excitements and happiness have brought us, a group of students from all over the world, together and became good friends. Now, most of us have gone back to our home cities/countries. We share the same hope, i.e. we will meet again one day.



Copenhagen in winter



Attending party



Rome in winter







## 龔天懿 R

#### 龔天懿 RMS Year 5

#### 生活在韓國

今年冬天,當全國各地還沉浸在春節的喜悦氣氛中時,我則背起了行囊,朝一個熟悉而又陌生的國度前行。

之前對韓國的認識主要依賴於電視劇,自己平時很喜愛看韓劇,也因此產生了要真正去那裡生活的想法。於是當學校給予自己去韓國高麗大學(Korea University)交換的機會時,我毫不猶豫地接受了。事實告訴我當初自己選擇去韓國交換半年的決定是正確的。因為生活在韓國讓我覺得很愉快,也真的獲得了許多特別的體驗。

韓國首爾是一個充滿活力和文化氣息濃郁的城市,傳統與現代結合的非常完美。 首爾市內保留著許多韓國的傳統建築,同時也有不少現代感十足的大樓、商場。 那每年都有各種特色傳統的文化活動,吸引著各國遊客前去參加。而給我印象 最深的還要算是首爾市民的穿著,無論男女老少,出現在街頭時給人感覺都是 那麼時尚潮流,光彩自信。

而高麗大學給我的印象也是非常多元化的。硬體上來說,學校設施先進,外觀氣派。人文環境上來說,師生關係融洽,學生活動也非常之多,尤其是全校性的大型活動,規模大到對整個首爾市都會造成影響,而同學們更是會投入百分之百的熱情,令我們這些交換生充分體會到韓國學生對自己學校的熱愛及有著強烈歸屬感。

現在回想起在韓國生活的期間,許多事情都很難忘,外出觀光、校園生活、韓 國飲食,這些都讓我非常的懷念。希望能有機會再次去韓國。

4

### Hsieh Wai Lun Raymond RMS Year 4

Hello everyone. My name is Hsieh Wai Lun Raymond. I have just come back from my one-year exchange in Stockholm in the Royal Institute of Technology. Going on an exchange programme in Sweden for a year was probably the wisest decisions I've ever made in my life.

As one of the four countries in the Scandinavia, I experienced its four seasons with drastic contrast. During summer time, you may have a problem to sleep well as the day dawns at 0100 and dusks at 2300. The winter from around November to April is really the so-called winter in despair. In late December, there is only 5 to 6 hours of daylight. Imagine how life would be if the sun sets at 1430 everyday? It's deadly dull to live in a complete darkness place all the times. Nevertheless, that is the way the Swedish have lived for their whole life. With all the snow covering the whole city, I have the chances to do something I've never done in Hong Kong before, like skiing, snowball fighting, sledging down the slope, making the original snowman.

I could never forget the trip to Kiruna- the northernmost city of Sweden, 100km inside the Artic Circle. I felt as if I was an Eskimo in the documentary when I was sledging with the husky over the snow.

At a temperature of -29 degree Celsius, your fingers just like teasing apart. I still felt chilly even I had put on all the functional clothing, such as down or Gotex wind-breaker. After arriving at the destination, we chopped wood to set up a fire for sauna. The temperature was around 60 degree Celsius inside the sauna. We were freaking crazily to go back and forth the sauna. We naked and did the most original way of Finnish Sauna. The eerie Northern Light shone above us in the starry sky. I could not believe what had come to my sight at that time. The Northern Light was actually moving like a creature. Even when I looked at the photos that I took, I still could not believe that I was actually in the scene.

In addition to travelling, another important aspect of my exchange life was to hang out with people. There was a common kitchen nearby my dormitory. It happened to have a mixed group of people from all over the world. I cooked everyday with an Iranian girl. I also did a group project with a guy from Nigeria. We had so much fun together. We dined, hanged out at pubs, chitchatting, played football and etc. With these plenty of gatherings that I could find out more about other countries and to distinguish reality from stereotype. In addition, upon frequently answering question about China and Hong Kong, I am more aware of the issues of my home country.

What's meant by broadening one's horizon? In my opinion, it is to experience something completely different and to start asking question on something that we've been taken for granted. I am thankful to have had this eye-opening opportunity.



Sledging with husky



Sweden



Northern light



與其他交換生勇闖瑞典北極圈·感受置身冰天雪地的感覺



騎著瑞典著名的紅色"小馬"Dalahäst

### 劉健慈 RMS Year 4

在這次一年的海外交換計劃我選擇的學府是瑞典的斯德哥爾摩大學。瑞典一向 對我,以及大部分香港人來説是一個陌生的國家。對其的認識,普遍只是-天寒地凍,遙遠的福利國家。回來後得悉,其實瑞典擁有很多特點。譬如瑞典 人在設計建築的創意、對大自然的熱愛以及保護、對男女,階級平等的追求、 對和平的捍衛、對音樂的熱愛和古道熱腸的性格,都是值得我們學習的。

從初到之時人地生疏的仿徨害怕,到臨別時流下依依不捨之淚;

從與五湖四海的朋友不期而遇,到假日時跟三五知己把臂同遊;

再小至每一次買菜做飯,大至在許多瑞典人前演奏中國音樂:

每個情景,無不歷歷在目,無不回首留戀的張望。每個認識的朋友,更令我時 刻掛念。

在這一年,自己確實得著不少,思想亦成熟很多。最大的得著,莫過於體會到 外國人對自己的國家歷史知識、文化傳統,一般都有充分的了解認識。從他們 言語當中可以感受到他們對自己國家一絲絲的感情。由此反思,自己對祖國的 認識太片面,太缺乏了。每當有人問起有關中國的問題,大多啞口無言。我認 為我們香港年青一輩應該多認識祖國,保護,弘揚其優良的傳統,以及利用香 港比較自由的社會狀況,多關心國內同胞的民生問題。

咫尺之圖,難寫千里之景。希望未來有機會可跟大家再次分享。



## Lai C

#### Lai Chu Shing Statistics Year 3

Wong Ka Wai and I visited the Colorado State University (CSU) in summer 2007. Colorado is a state located in the Rocky Mountain region of the United States of America and CSU is a university in northern Denver, the capital of State of Colorado, where it is called Fort Collins. The main reasons that we were there were to broaden our horizons and to observe how graduate students and professors conducted researches.



It was a 6-week short trip from late May to early July. Although it was a short exchange period, we both found it enjoyable. We spent more than 16 hours to travel from HK to Fort Collins and were exhausted when we arrived at our apartment.

The climate of Fort Collins is completely different from that of Hong Kong. It is quite hot and dry that our bodies can be dehydrated within a few hours. We needed to drink a lot of water in order to keep our bodies in good conditions. Surprisingly, the dry climate could dry our washed clothes hanged indoor in two or three hours, which is almost impossible in Hong Kong. I did like the dry weather because I did not sweat a lot and did not feel sticky under the hot and sunny days.

In addition to climate, another aspect that we need to adapt is food. Western cuisine is often cold but Chinese dishes are always hot. People there used to have simple but healthy food for lunch, for example sandwiches with hams and vegetables and an apple are the most common one. In order to have hot dishes, we learnt to cook Chinese dishes with western cooking utensils. I missed the Chinese food so much.

During the trip, I participated in activities undertaken in the CSU and assisted in conducting research. We attended a statistics conference entitled Graybill Conference VI. It was hosted by the Department of Statistics, CSU every year and the one that I attended was the sixth of the Graybill Conference series. During the conference period, I met many renowned scholars performing researchers in statistics discipline. They presented their research interests to the audiences and the audiences would ask questions of the corresponding topics. The topics including but not limited to bioinformatics, applied probability and time series. I tried to understand their presentation; however, it was too difficult for me to understand fully at the moment.

The conference lasted for four days. On the last day, Professor Peter J. Brockwell of CSU invited all the keynote speakers to his home to have a party. Because there were different people from different countries speaking different languages, we shared our own languages and had a multi-language lesson on Chinese, French, English, Japanese, Spanish and Czech. It was an exciting experience.

Wong Ka Wai and I also worked on several programming projects. The first one was about regression. It was a teaching-aided programme to help teachers project their own dataset for some given residual plots. However, we encountered many problems from the algorithms and it was quite time-consuming to solve the problems. We spent several days to do the programming and several weeks to debug the programme. Another project was about extreme value estimates. We did simulations on a new proposed estimator to see whether its performance was better than the usual one or not. It was fun to do these projects.

Living in the U.S. is very relaxing. People do not need to work under pressure all the time. They can spend a whole afternoon inside a cafe drinking coffee. I wish I could be as relaxed as they could in Hong Kong.

Finally, I would like to thank the professors and graduate students of CSU who were being kind and nice to take care of us in the CSU. Also, I would like to thank Professor Thomas Lee of Department of Statistics, CUHK and our department for providing such opportunities for undergraduate students to visit overseas universities and to experience different cultures. All in all, I did have a very good time in the U.S. although I missed Hong Kong very much during the journey. I hope there will be more exchange opportunities for students in the years to come.



Prof. N.H. Chan, Prof. Thomas C.M. Lee, Randy Lai and Raymond Wong attended the Graybill VI conference held in Colorado State University.







Elevation: 12000 Feet: 2.3m above sea level

Carnival

Hiking at Rocky Mountain

## Wong Ka Wai Statistics Year 4

In March 2007, similar to many next-to-final year students, I was busying with working on an optimization problem. The problem was to "optimize" my future by "varying" the content of the summer holiday. But what is the best solution to this problem? For a long time, I have planned to further my study in graduate school and finally, I chose to join the exchange programme held by my department.

The exchange programme provided students with an opportunity to participate in research in Colorado State University. During the exchange programme, I was given some paper-reading, programming and simulation tasks. For instance, I was asked to do some simulation test on a new estimator to evaluate its performance before the professor worked deeply on that estimator. All of the working experience is valuable and unique especially for an undergraduate student.

The most precious experience was to attend the Graybill Conference VI, an academic conference featuring Bioinformatics and Time Series. Professor N.H. Chan, our department head, was also invited to deliver a speech in the conference. One of the PhD students in Colorado State University told me that it was very rare for an undergraduate to have a chance attending an academic conference. Although I could not understand most of the content, it had broadened my horizon and had enriched my experience in the academic research area. It is definitely what I need to know before I choose to work in academic area in the future. Now I know more about the research work and the system of graduate school. This exchange programme is definitely an important sign for my future.

Life is like a box of chocolate, you never know what you are going to get. Sometimes you bite a sweeter part of it than you expected. I think my trip is a sweeter bite. I enjoyed the different lifestyle in Colorado. Colorado is famous for its splendor and magnificent scenery which is suitable for hiking and camping. I was not good at these outdoor activities but I enjoyed and treasured the time being so close to the nature. During the camping, I was told that a bear had visited our camp site when I was sleeping. Luckily, I did not look like a fish which bears liked most. We went hiking in the Rocky Mountain. I reached 2.3 miles above sea level! It should be the highest point I have ever reached (although I started hiking from about 2.2 miles over sea level after an hour traveling by car). There were still a lot of interesting experiences like watching a rodeo game, having a pizza buffet and joining the Taste of Fort Collins (a carnival), etc. I shall always treasure those memories in CSU.

It is definitely a fruitful trip for me. To make it a great success, much efforts and resources had been put into organizing this exchange programme. I am grateful to the Department of Statistics, CUHK for organizing and funding such a meaningful programme as well as the Global Internship Programme for its generous funding. Last but not least, I would like to thank Professor Thomas Lee for taking in-charge of this programme and looking after me in Colorado.

I believe I have chosen the right answer to my problem and made good use of my holiday. I wish the continuous success of this program in the coming years.

473

## 張永鏘 RMS Year 4

大家好,我是張永鏘 (Felix)。我於2007年1月至6月到瑞典作交流生,因而 需要延長修業年至2008年才會畢業。

#### 交流的地方背景:

我去了瑞典的一個小城市 Örebro 作交流生的,這個小城有大約有140,000人 口,以人口計算,是瑞典第六大的城市。城內的公共交通工具只有巴士,無 論遠近路程,一律每程\$10SEK(瑞典克朗),而付車費後的三個小時內可任意 免費轉車,因此上巴士前我大多會詳細的計劃路程。另外,這裡的人很喜歡 以單車代步,城市裡也有很多單車徑。

#### 大學背景:

我去的大學是 Örebro University。前身是一間 College,剛轉為大學不久。 我在這裡修讀了四個學科。與中大不同的是,每一個學科只教一個月便考試, 而考試前也要註冊才可考試。以電腦和行政系統來比較,則還是中大的較先進!

交流生會被隨機安排到學校的宿舍或附近的住宅區居住。我是住在住宅區的, 離大學較遠,但租金較便宜(每月\$1,550SEK)。我是和另外兩位交流生一起 住一個單位的,他們分別來自西班牙和法國,三人每人一間房。不論是學校 宿舍或是住宅區,學校不反對學生帶朋友(不論是男或女)來留宿。

平日我大多是自己煮食的,因此練出了一手不錯的廚藝。這裡的肉和菜都非 常貴,但奶類產品卻較香港便宜,我也因此而喝多了牛奶和吃多了芝士。還有, 起初我到步的時候是冬天,下午三時就天黑了。後來到了五月,是日長夜短, 凌晨兩點半就天光了,對我來說最辛苦的是要抓緊黑夜的時機睡覺!

#### 交流生的活動:

在這裡的交流生大多會在每個星期三開派對,每一次都由其中一個國家的人 作搞手,每一次都有不同的主題,如卡通、民俗服等。結束後有時還會到市 內的士高去跳跳舞等,這裡的的士高沒有香港的那麼龍蛇混雜,而且是室內 禁煙的,入場費也較便宜(學生價\$40SEK)。

與其他交流生一樣,我也趁此機會在歐洲旅行。我先後去了芬蘭、挪威、丹麥、 德國、捷克、奧地利、瑞士、意大利和西班牙。不但看了不少名勝古跡,也 體會到各國的風土人情和文化特色,可説是增廣見聞。

#### 感想:

在這個交流計劃中,我體會到不少國家的文化,如西班牙人較熱情、日本人 較拘謹但親切有禮、瑞典人較文靜等。希望大家作交流生前,多多思想除了 學術以外可有的得著。



BBQ with friends



Football team



Photo taken with Japanese ladies

#### **Alumni Networking**

#### Alumni Website

An alumni website has been launched. To register as a member, please go to www.sta.cuhk.edu.hk/alumni and fill in the New Member Registration Form.

#### Notification of Change of Correspondence Address

Please fill in the form below and send to:

Rm 119 Department of Statistics The Chinese University of Hong Kong Shatin, N.T.

Name :
Year of Graduation :
Address :
Email :