

Introduction

Welcome to the Workshop on the Complexity of Multivariate Problems, which will be held at Hong Kong Baptist University, October 4–8, 1999. This workshop is the first in a series being held during the Fall 1999 Special Semester on Foundations of Computational Mathematics in Hong Kong — organized by the City University of Hong Kong. Around 60 international scholars from different disciplines and countries will participate in this workshop. We hope that this forum will provide opportunities for fruitful exchange on recent advances in both theory and application.

We are glad that you will be joining us. This Final Announcement provides you with information to help you prepare for the Workshop. The following section highlights special features of the program, and the section beginning on the page 3 gives advice on travel, sightseeing and shopping. If you have any questions, please do not hesitate to contact the organizers (see page 5 for contact information).

Workshop Highlights

Workshop Venue

The Workshop will be held in lecture hall NAB 209 of the Lam Woo International Conference Centre of Hong Kong Baptist University. Unless you have made other arrangements for yourself, you will be staying at NTT (the Ng Tor Tai International Guest House) across the street from the conference centre. A map showing the location of the conference centre and NTT is given on page 5.

Information Desk and Internet Access

During the Workshop, there will be an information desk in the lobby of the conference. If you have any questions or need help, please ask anyone sitting there. Near the information desk there will be a notice board with updated information about the Workshop. Please check the notice board frequently. The information desk will have a limited amount of stationery supplies should you need something. Staff at the desk can also help you to make a limited amount of photocopying. There will be computer terminals available nearby, where you can have access to the internet and check your e-mail. Anyone who wants to distribute pamphlets or preprints can leave the materials at the information desk.

Program

The conference program includes plenary talks by the following scholars:

Kai-Tai Fang, *Hong Kong Baptist Univ.*
Stefan Heinrich, *Univ. of Kaiserslautern*
Fred J. Hickernell, *Hong Kong Baptist Univ.*
Harald Niederreiter, *Austrian Academy of Sciences*
Erich Novak, *Univ. Erlangen-Nurnberg*
Art Owen, *Stanford Univ.*
Ian Sloan, *Univ. of New South Wales*
Shu Tezuka, *IBM Corp., Tokyo*
Ren-Hong Wang, *Dalian Univ. of Technology*
Grzegorz Wasilkowski, *Univ. of Kentucky*
Henryk Woźniakowski, *Columbia Univ. & Univ. of Warsaw*

There will also be more than 40 technical talks. In order to allow you to enjoy all of the talks we have avoided parallel sessions. The schedule of the talks starts on page 7 and can also be found in the homepage: www.math.hkbu.edu.hk/complexity99/. Minor changes to the program might be

made later if necessary. Any changes will be announced to participants on the notice board. The abstracts of all talks are posted on the web. A hard copy will be distributed at check-in.

Epson Foundation Session on Finance Problems

The talks on Wednesday morning, October 6, will be devoted to Finance Problems. This session will be chaired by Joseph F. Traub, Professor and Founding Head of the Computer Science Department at Columbia University and a Member of the National Academy of Engineering. After an introduction by Prof. Traub there will be a plenary talk by Shu Tezuka of IBM Tokyo followed by several technical talks by overseas and local experts. We are grateful to the Epson Foundation for underwriting part of the costs of this session. Because of its generosity local academics and practitioners may attend this session and the lunch afterwards for HK\$100.

Epson Foundation Banquet

The Workshop banquet will be held on Wednesday night, October 6, at the House of Canton restaurant in the Festival Walk Shopping Centre. Participants will enjoy a Chinese banquet and a talk by Xiaolu Wang of Advanced Analytics, Inc. on *The Most Dangerous Game: Hunters Could be Hunted — Hedge Funds and Arbs in the Global Market*. We are grateful to the Epson Foundation for subsidising the cost of the banquet. Workshop participants may attend the banquet at no extra charge. Guests may attend the banquet by purchasing a ticket in advance at the registration desk at a subsidised price of HK\$200. Tickets should be purchased by noon Tuesday, October 5.

Welcome Reception, Lunches and Tea Breaks

An informal Welcome Reception will be held in the ground floor function room of NTT from 19:00 to 20:30 on Sunday, October 3. In order to facilitate informal discussion among participants complimentary lunches and tea breaks will be provided. The tea breaks will be held outside the lecture hall. Lunches will be held in the Renfrew Seafood Restaurant, located one floor above the lecture hall, on Monday, Wednesday and Friday, and in the ground floor function room of NTT on Tuesday and Thursday. Guests wishing to join the lunches may purchase tickets at the information desk.

Book Sale

The Hong Kong Baptist University campus bookstore will host a book exhibition during the Workshop. Academic books, including some of those authored by the speakers, will be available for sale at a discount.

Instructions to Speakers

The lecture hall will be equipped with two overhead projectors and a whiteboard. If you need any additional equipment, such as video projector, slide projector or computer, please notify us by September 15 so that we can make the necessary arrangements.

Workshop Proceedings

All speakers are invited to submit manuscripts based on their talks for a special issue of *the Journal of Complexity* (<http://www.apnet.com/www/journal/cm.htm>) which will be edited by Fred J. Hickernell and Henryk Woźniakowski. Manuscripts should fall within the scope of the Journal of Complexity as described in the Information for Authors on the journal's web site. Papers based on plenary talks may be reviews of recent results or expositions of new results. Papers based on technical talks should contain significant new results. All manuscripts will undergo a review process to ensure that they meet the standards of the journal. Since many of the referees will have attended the Workshop, we expect the review process to be relatively quick. To submit a manuscript please send two hard copies, and preferably also an electronic copy (Latex and/or postscript) to the workshop organizers at the address on page 5. In preparing your manuscript

please follow the guidelines given in the journal's Information for Authors on the journal's web site. If possible, please use the journal's Latex styles, which can be downloaded from the web site. The deadline for submission of manuscripts is February 15, 2000. We look forward to your contribution!

Coming and Going

Before You Come

Please make sure your travel documents and visas are in order. All visitors to Hong Kong and Mainland China must hold a valid passport. Residents of some countries require a visa to enter Hong Kong. This can be obtained through any Chinese Consulate. Anyone who is not a Chinese citizen will need a visa to travel to the Mainland.

The NTT guest house would like to know your airline, flight number, and arrival time. If you have not sent us this information yet, please e-mail or fax it to us before September 15.

If you have special dietary requirements, please inform us by e-mail or fax before September 15.

Upon Arrival

Upon arrival in Hong Kong you are advised to obtain HK\$500 cash for initial expenses (US\$1 ≈ HK\$7.75). Money can be exchanged at the minibank at the Hong Kong International Airport, Lo Wu or Kowloon railway station.

Unless you have made other arrangements for yourself, you will be staying at the NTT guest house at Hong Kong Baptist University. A map showing the location of NTT and information on how to get to NTT from the airport or railway stations is given on pages 5-6. Unless your accommodation is being supported by the Workshop, you are responsible for paying NTT directly for your accommodation at the rate of HK\$330 per room per night. Payment may be made by credit card or cash.

Check-in

The NTT registration desk is open 24 hours. A Workshop information desk will be set up at NTT from 11:00 to 20:30 on Sunday, October 3, 1999, where you may pick up your conference materials. An informal Welcome Reception will be held in the ground floor function room of NTT from 19:00 to 20:30 on that day.

Traveling, Eating and Shopping

Hong Kong has an efficient public transportation system that includes buses, taxis, a railway (KCR) and an underground railway (MTR). For sight-seeing and shopping, the most convenient form of travel is the KCR (New Territories) and the MTR (Hong Kong Island and Kowloon). Both the KCR and the MTR have Kowloon Tong stations, which are within walking distance to the Baptist University. For those places not directly accessible by railway, it is suggested that you take a taxi from the nearest railway station.

We may have the highest number of restaurants per capita in the world. If you enjoy exploring, you will find Hong Kong offers all kinds of cuisine (Chinese, Japanese, Thai, Vietnamese, American, European, etc.) in all kinds of environments (from outdoor stalls to elegant restaurants). However, the correlation between the quality of food and the price is low.

Around the corner from the lecture hall is a student cafeteria serving inexpensive food. On Junction Road near the conference venue there is a Park 'N Shop supermarket and several restaurants and banks. Two nearby shopping centres are Lok Fu Shopping Centre (at Lok Fu MTR station) and

Festival Walk (at Kowloon Tong MTR station). Lok Fu has a more local flavour while Festival Walk is more modern and more expensive. It is a 15-minute walk from the university to either of these shopping centres.

Tsim Sha Tsui and Causeway Bay are two large shopping areas in Hong Kong. The Hong Kong Tourist Association also provides information at the airport and at either terminus of the Star Ferry on where to shop. You can exchange foreign currency into local currency at NTT, money changers, or banks (usually the best rate). Almost everywhere in Hong Kong there are automatic teller machines that dispense local currency to holders of major credit cards.

Climate

Hong Kong's climate is sub-tropical, tending towards temperate for nearly half the year. Gales are not unusual during October. Air-conditioning is very popular in Hong Kong. Thus, we recommend you to bring a sweater or jacket with you. The table below shows some useful meteorological normals and extremes for Hong Kong's October from 1961 to 1990.

Rainfall:	Mean total 144.8mm
Temperature:	Mean 25.2°C, Max 27.9°C, Min 23.1°C
Relative humidity:	Mean 73%

If Departing by Air

Please remember to reconfirm your return flight soon after arrival. Also put aside the HK\$50 per person departure tax that will be required when you leave Hong Kong by air.

Acknowledgements

This workshop would not be possible without substantial financial donations from the following organizations:

Epson Foundation Ltd.

Hong Kong Baptist University

K. C. Wong Foundation

Liu Bie Ju Centre of Mathematical Sciences, City University of Hong Kong

Stephen Smale and Felipe Cucker from City University of Hong Kong drew together several local and overseas academics to organize the Fall 1999 Special Semester on Foundations of Computational Mathematics in Hong Kong. Three other workshops are planned for this semester, all to be held at City University:

Complexity of Equation Solving and Algebra, October 11–15

Minimal Energy Problems, November 8–12

Wavelets and Multiresolution, November 29 — December 3

Part of the donation by the Epson Foundation is subsidising the Epson Foundation Session on Finance and the Epson Foundation Banquet. The donation by the K. C. Wong Foundation supports Mainland Chinese scholars to attend the Workshop. In addition to a monetary grant, Hong Kong Baptist University provided free use of the conference facilities.

The workshop organizers, Fred J. Hickernell and Henryk Woźniakowski, are assisted by

Gang Wei,

Elsa Fong,

Alfred Ngai,

Tammy Lam, and

all from the Department of Mathematics, Hong Kong Baptist University.

Questions?

If you have any questions regarding the Workshop, please do not hesitate to contact us.

Complexity'99
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Kowloon Tong
Hong Kong SAR
China

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How to Get to Ng Tor Tai International Guest House

Ng Tor Tai International Guest House
32 Renfrew Road
Kowloon Tong
Hong Kong

吳多泰國際中心
地址: 九龍塘聯福道三號

Telephone: (852) 2301-2301
Fax: (852) 2191- 9333

<u>From</u>	<u>By</u>	<u>Fare</u>	<u>Estimated Time</u>
Hong Kong	E22 Bus	HK\$18	1 hour
International Airport	Taxi	≈ HK\$300	35 minutes
Kowloon Tong KCR or MTR station	Walk		15 minutes
	Taxi	≈ HK\$20	5 minutes
Hung Hom KCR station	KCR to the Kowloon Tong station and then walk	HK\$3.5	10 minutes KCR 15 minutes walk
	Taxi	≈ HK\$40	25 minutes

Remark: There is an extra charge of HK\$5 for handling each piece of large luggage when taking a taxi.