CIMPA UNESCO THEMATIC SCHOOL
DATA ASSIMILATION FOR GEOPHYSICAL FLUIDS

WUHAN University, China, May 3 – May 14 , 2010

Centre International de Mathématiques Pures et Appliquées	UNESCO	Wuhan University	Consulat Général de France à Wuhan	INRIA

Monday, May 3, 2010

Chairman	Hua Chen
9:30-10:00	*Opening*
10:00 -10:15	*Take Photo*
10:15-10:30	*Break*
10:30-12:00	*Introduction to data assimilation (François-Xavier Le Dimet)*
12:00 -14:00	**Lunch**
Chairman	
14:00-15:30	*Ocean observation (Masafumi Kamachi)*
15:30-15:50	*Break*
15:50-16:50	*The numerical weather prediction models and their observation requirements in meteorology (Jean Pailleux)*
16:50-17:20	*A communication optimal LU decomposition (Hua Xiang)*
18:00	*Supper*

Tuesday, May 4，2010

Chairman	
8:30-10:00	*Introduction to optimization (François Xavier Le Dimet)*
10:00-10:30	*Break*
10:30-12:00	*Data Assimilation #1 (Emmanuel Cosme)*
12:00 -14:00	**Lunch**
Chairman	
14:00-15:30	*Data Assimilation #2 (Emmanuel Cosme)*
15:30-15:50	*Break*
15:50-16:50	*Ocean models (Eric Blayo)*
16:50-17:50	*Application of ocean data assimilation (Masafumi Kamachi)*
18:05	*Supper*

Wednesday, May 5，2010

Chairman	
8:30-10:00	*Data Assimilation #3 (Emmanuel Cosme)*
10:00-10:30	*Break*
10:30 -12:00	*Data Assimilation #4 (Eric Blayo)*
12:00 -14:00	**Lunch**
14:00-17:30	*Free*
18:00	*Supper*

Thursday, May 6，2010

Chairman	
8:30-10:00	*Data Assimilation #5 (Eric Blayo)*
10:00-10:30	*Break*
10:30 -12:00	*Data Assimilation #6 (Emmanuel Cosme)*
12:00 -14:00	**Lunch**
Chairman	
14:00-15:30	*Data Assimilation #7 (Arthur Vidard)*
15:30-16:00	*Break*
16:00-17:00	*Operational data assimilation in meteorology (Jean Pailleux)*
17:00-17:30	*A two dimensional inverse natural convection problem for estimating the boundary heat flux (Jeff Chak-Fu Wong)*
18:00	*Supper*

Friday, May 7，2010

Chairman	
8:30-10:00	*Data Assimilation #8 (Eric Blayo)*
10:00-10:30	*Break*
10:30 -12:00	*Data Assimilation #9 (Arthur Vidard)*
12:00 -14:00	**Lunch**
Chairman	
14:00-15:00	*Data assimilation for motion estimation, curve tracking and SST Interpolation from satellite image sequences (Thomas Corpetti)*
15:00-16:00	*Coupled data assimilation with multiscale filters (Mark Asch)*
16:00-16:30	*Break*
16:30-17:45	*Students' presentations*
18:00	*Banquet (Fengyi Hotel)*

Saturday, May 8，2010

Chairman	
8:30-10:00	*Data Assimilation #10 (Emmanuel Cosme)*
10:00-10:30	*Break*
10:30 -12:00	*Data assimilation and inverse modeling for air quality (Marc Bocquet)*
12:00 -12:30	*Monitoring network design for air quality (Wu Lin)*
12:30 -14:30	**Lunch**
14:30-17:30	*Free*
18:00	*Supper*

Monday, May 10, 2010

Chairman	
8:30 -10:00	*Data Assimilation #11 (Eric Blayo)*
10:00-10:30	*Break*
10:30-12:00	*Data Assimilation #12 (Emmanuel Cosme)*
12:00 -14:00	**Lunch**
14:00-17:00	*Computer training: filtering (Laurent Debreu)*
18:00	*Supper*

Tuesday, May 11，2010

Chairman	
8:30-10:00	*Data Assimilation #13 (Eric Blayo)*
10:00-10:30	*Break*
10:30 -12:00	*Data Assimilation #14 (Arthur Vidard)*
12:00 -14:00	**Lunch**
14:00-17:00	*Computer training: variational methods (Laurent Debreu)*
18:00	*Supper*

Wednesday, May 12，2010

Chairman	
8:30-10:00	*Data Assimilation #15 (Eric Blayo)*
10:00-10:30	*Break*
10:30 -12:00	*Data Assimilation #16 (Arthur Vidard)*
12:00 -14:00	**Lunch**
14:00-17:30	*Free*
18:00	*Supper*

Thursday, May 13，2010

Chairman	
8:30-10:00	*Data Assimilation #17 (Arthur Vidard)*
10:00-10:30	*Break*
10:30 -12:00	*Data Assimilation #18 (Arthur Vidard)*
12:00 -13:30	**Lunch**
Chairman	
13:30-16:30	*Computer training: Advanced (Laurent Debreu)*
16:30-16:50	*Break*
16:50-18:20	*GPS RO Data Assimilation (Xiaolei Zou)*
18:30	*Supper*

Friday, May 14，2010

Chairman	
8:30-9:30	*Conditional nonlinear optimal perturbation and its applications (Wansuo Duan)*
9:30-10:30	*Quality control, model verification and 1D-Var assimilation of AIRS radiance observations (Xiaolei Zou)*
10:30-11:00	*Break*
11:00 -12:00	*Application of ensemble Kalman filter/Smoother to coastal oceanography (Jiang Zhu)*
12:00	*Conclusion*
12:00 -14:00	**Lunch**

Remarks
1). All the courses and lectures would be given in the Lecture Room in the Main Building of the Math. School of Wuhan University.
2). The courses for Computer Training would hold in the Computer Room in another Building of the Math. School of Wuhan University.

Invited Speakers

1. Prof. Mark Asch
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4. Prof. Thomas CORPETTI ,
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14. Dr. Hua Xiang, Associate Professor, School of Mathematics and Statistics, Wuhan
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16. Prof. Xiaolei Zou
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Useful Information

1. Conference Hotels

  All invited speakers and international participants are arranged to stay at the conference hotel **FengYi Hotel** (丰颐大酒店), Wuhan (武汉), China (中国).

Hotel address: No. 336, Bayi Road, Wuchang, Wuhan, Hubei province
(湖北省武汉市武昌八一路 336 号)

Telephone: 0086-27-67811888

How to get to the hotel:

1) From **Wuhan Tianhe International Airport** (武汉天河国际机场) to FengYi Hotel

You may directly take a taxi from the airport to **FengYi Hotel**, it takes about 45-60 minutes (approx. CNY110), or you can take the airport shuttle buses:

The airport shuttle bus runs once every 30 minutes, from 9:00am to the last flight of each day. You should get off the shuttle bus at **Fujiapo Station** (付家坡站), Wuchang (it costs CNY30). Then you may take a taxi from **Fujiapo Station** to **FengYi Hotel** (approx. CNY15).

2) From **Railway Stations** to **FengYi Hotel**

You may take a taxi from the **Wuchang Railway Station**, **Hankou Railway Station** or **Wuhan Railway Station** to **Fengyi Hotel**.
It takes about 15, 45 and 30 minutes respectively (approx. CNY18, 40 and 35 resp.)

2. A useful Chinese sentence
Show this sentence to your taxi or bus driver if needed in Wuhan:

 请送我到丰颐大酒店（湖北省武汉市武昌八一路 336 号．电话：67811888），要发票．

(Please drop me off at FengYi Hotel, and give me a receipt of the taxi fare)

3. Conference Venue
Mathematics Hall, School of mathematics and statistics, Wuhan University. We have buses to arrange your transportation from your Hotel to the **Conference Venue**
(会场: 武汉大学数学与统计学院数学会堂)

4. Meals
The invited speakers and the foreign students will have meals at Fengyi Hotel.
(就餐: 邀请专家及外国学员在丰颐大酒店就餐)

5. Contact persons and phone numbers

You may call the following cell phone numbers when you need assistance in China:

13659847872 (Prof. Rong Wang)
13986110652 (Prof. Hui Feng)
15972200305(Prof. Hua Xiang)
13397177528(Prof. Xiufen Zou)
15827047533(Dr. Guoxian Chen)

Bus Schedule

Monday, May 3, 2010

09:00   Fengyi Hotel to Conference Venue
12:00   Conference Venue to Fengyi Hotel (for lunch)
13:40   Fengyi Hotel to Conference Venue
17:30   Conference to Fengyi Hotel (for dinner)

Tuesday, May 4, Thursday, May 6 and Friday, May 7, 2010

08:10   Fengyi Hotel to Conference Venue
12:00   Conference Venue to Fengyi Hotel (for lunch)
13:40   Fengyi Hotel to Conference Venue
17:50   Conference Venue to Fengyi Hotel (for dinner)

Monday, May 10 and Tuesday, May 11, 2010

08:10   Fengyi Hotel to Conference Venue
12:00   Conference Venue to Fengyi Hotel (for lunch)
13:40   Fengyi Hotel to Conference Venue
17:00   Conference Venue to Fengyi Hotel (for dinner)

Wednesday, May 5, Wednesday, May 12 and Friday, May 14, 2010

08:10   Fengyi Hotel to Conference Venue
12:00   Conference Venue to Fengyi Hotel (for lunch)

Saturday, May 8, 2010

08:10   Fengyi Hotel to Conference Venue
12:30   Conference Venue to Fengyi Hotel (for lunch)

Thursday, May 13, 2010

08:10   Fengyi Hotel to Conference Venue
12:00   Conference Venue to Fengyi Hotel (for lunch)
13:10   Fengyi Hotel to Conference Venue
18:20   Conference Venue to Fengyi Hotel (for dinner)

The map from Fengyi Hotel to Conference Venue (School of Mathematics and Statistics, Wuhan University)

School of Mathematics and Statisctics--Conference venue
数学与统计学院-会场

lion mountain
(狮子山)

樱4舍   樱3舍   樱2舍   樱1舍

Lake
中心湖

球场
球场
电影场
九 · 一二操场

图书馆

Meiyuan Restaurant
(梅园餐厅)

LuoJia Hill
(珞珈山)

Hospital(医院)

kindergarten
(幼儿园)

Family Area
(家属区)

Family Area
(家属区)

FengYi Hotel
(丰颐大酒店)