

# **PROGRAM**

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## **Flow Dynamics**

**First International Conference on Flow Dynamics**

## **AFI/TFI-2004**

**Fourth International Symposium on Advanced Fluid Information /  
First International Symposium on Transdisciplinary Fluid Integration**

November 11-12, 2004

Sendai International Center, Sendai, Japan

# **First International Conference on Flow Dynamics**

## **Organized and Sponsored by**

The 21st Century COE program, "International COE of Flow Dynamics," Tohoku University, Japan

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# Fourth International Symposium on Advanced Fluid Information / First International Symposium on Transdisciplinary Fluid Integration

**Hosted by:** Institute of Fluid Science, Tohoku University, Japan

**Sponsored by:**

Tohoku University Foundation

Science Foundation for Fluid Mechanics and Instruments

Inoue Foundation for Science

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## Plenary Lectures

### **TFI Plenary Lecture**

(9:10-10:10, 11 November, at “Tachibana”)

**Combined Heat, Air, Moisture, and Pollutants Transport in Building  
Environmental Systems  
Prof. Jianshun Zhang (Syracuse University, U.S.A.)**

### **AFI Plenary Lecture**

(13:00-14:00, 11 November, at “Tachibana”)

**Intelligent Systems: Shaping the Future of Aeronautics and Space  
Exploration  
Dr. Kalmanje KrishnaKumar (NASA Ames Research Center, U.S.A.)**

### **COE Plenary Lecture**

(9:00-10:00, 12 November, at “Hagi”)

**Dynamic Activity of Water on the Nature Technology  
Dr. Hideki Ishida (INAX Corporation, Tohoku University, Japan)**

## General Sessions

### **First International Conference on Flow Dynamics**

#### **Organized Sessions:**

OS1: Research and Development of Japan Made High Performance Jet Plane

OS2: Nano-mega Ground Effect and Applications

OS3: Functional Fluids Flow Dynamics in Interactive Systems

OS4: Force Generation through Shock Wave Dynamics

OS5: Alleviation of Shock-induced Hazards

OS6: Planetary Entry Flow Physics

OS7: Water Dynamics

OS8-A: Young Birds Hatchery Session on Flow Dynamics

OS8-B: International Students/Young Birds Session on Flow Dynamics

### **Fourth International Symposium on Advanced Fluid Information / First International Symposium on Transdisciplinary Fluid Integration**

#### **Mini-Symposia:**

MS1: Fluid Informatics in Bio-Fluid Systems

MS2: Fusion of Biotechnology and Nanotechnology

MS3: Advanced Fluid Information and Aerospace Applications

MS4: Collaborative Visualization and Volume Communication

MS5: 5th Japan-Korea Seminar on Combustion and Heat Transfer & CERC Workshop

MS6: Smart Material, Structural and Fluid Systems

MS7: Advanced Fluid Information for Controlling Flows

## **General Information**

### **Registration:**

The conference registration desk is located at **Main Hall, 2nd floor**.

**Thursday, 11 November, 8:30–17:00 hrs**

**Friday, 12 November, 8:30–17:00 hrs**

### **Banquet:** (at Sakura 1)

**Thursday, 11 November, 19:00–21:00 hrs**

### **Exhibition:** (at Sakura 2)

All conference attendees may view the exhibition for free. Exhibition hours will be:

**Thursday, 11 November, 15:00–21:00 hrs**

**Friday, 12 November, 9:00–17:00 hrs**

### **Internet access corner:** (Sakura 2)

All conference attendees may use internet for free. Free Ethernet access will be possible at Sakura 2 during the conference. Standard wired hubs (with RJ45 sockets) will be provided for networking.

Internet corner will be opened at:

**Thursday, 11 November, 15:00–21:00 hrs**

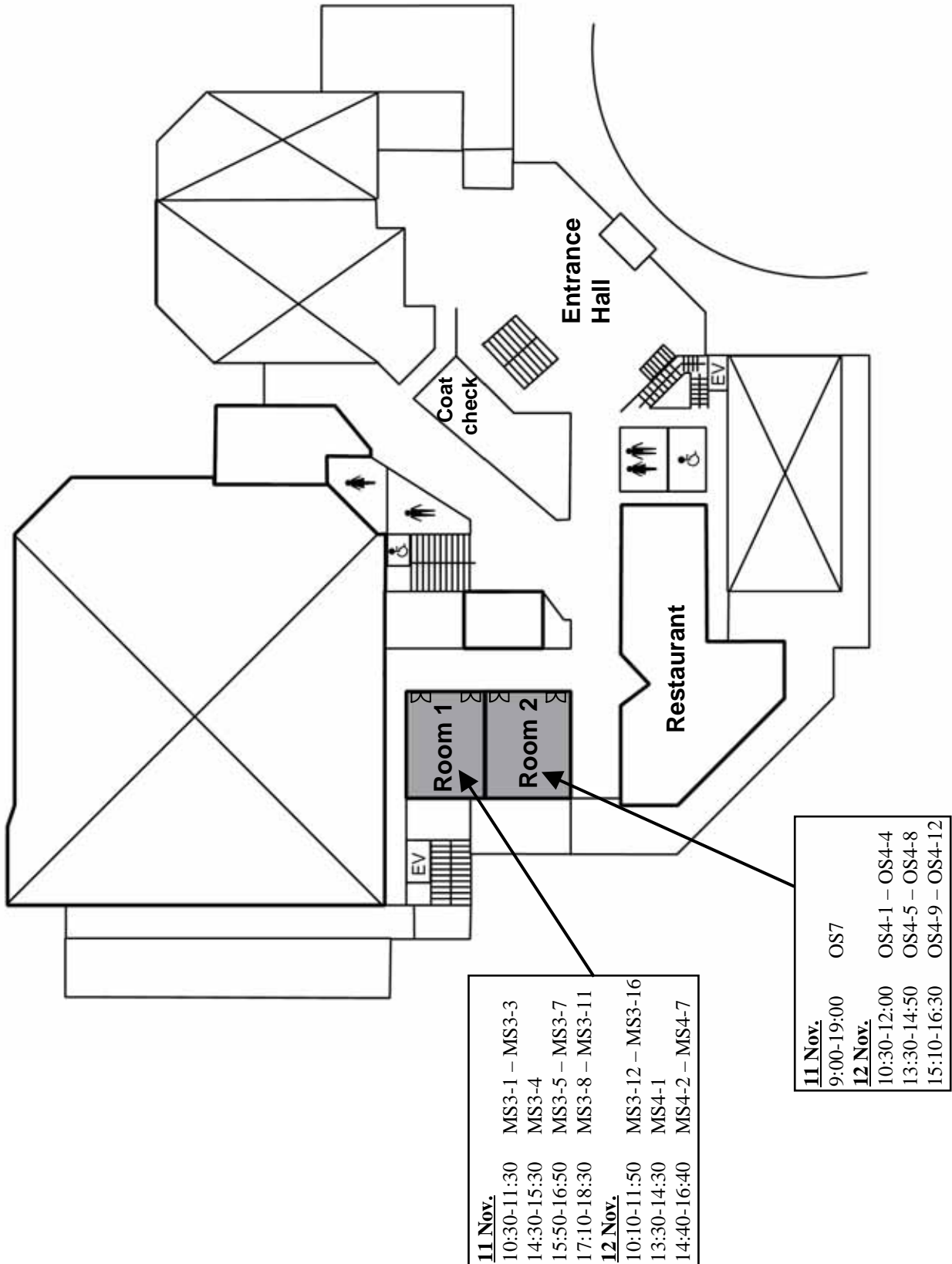
**Friday, 12 November, 9:00–17:00 hrs**

### **Coffee service:**

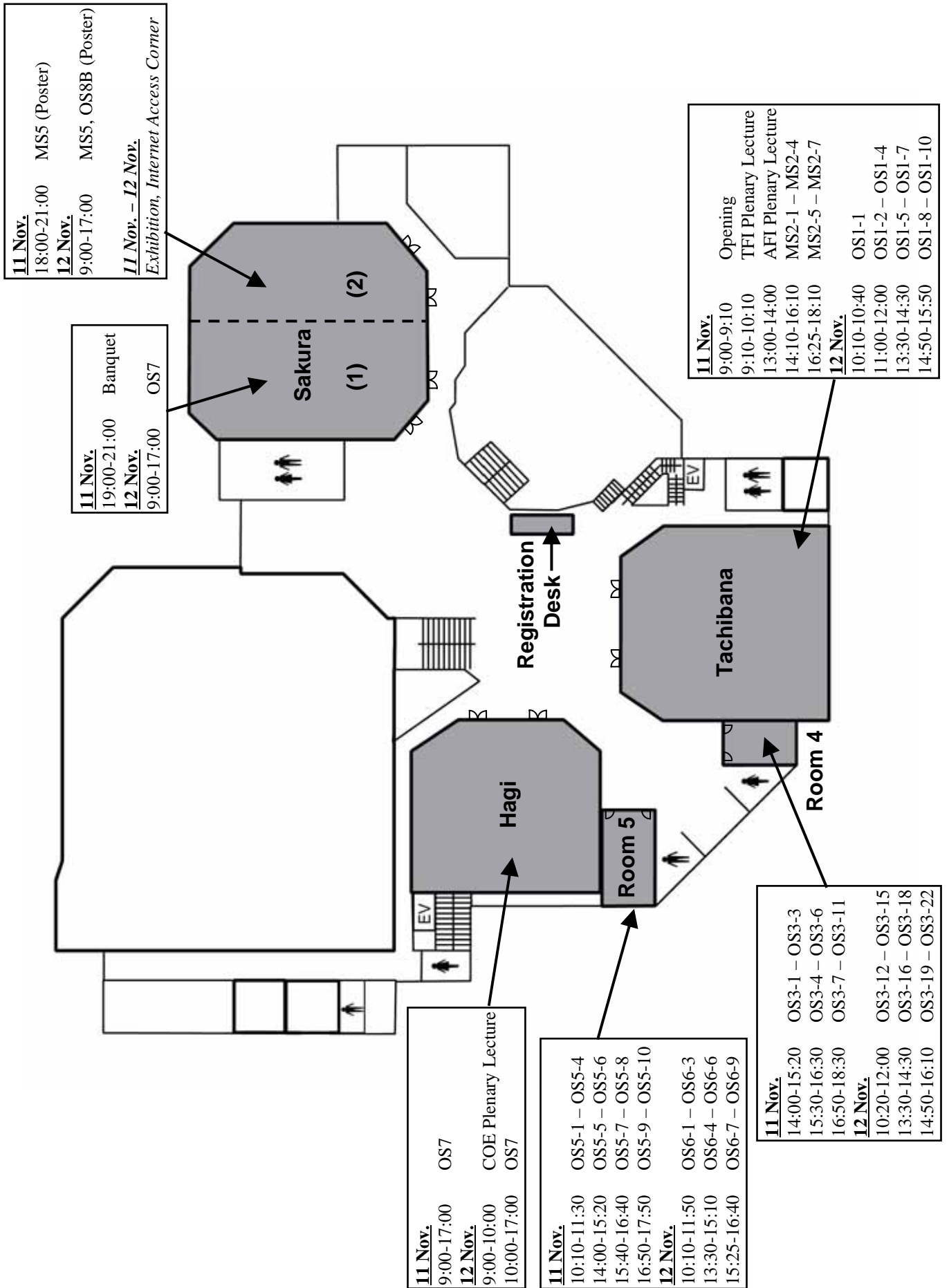
Coffee service is prepared at **3rd floor**, in front of the stairs.

# Floor Plan of Sendai International Center

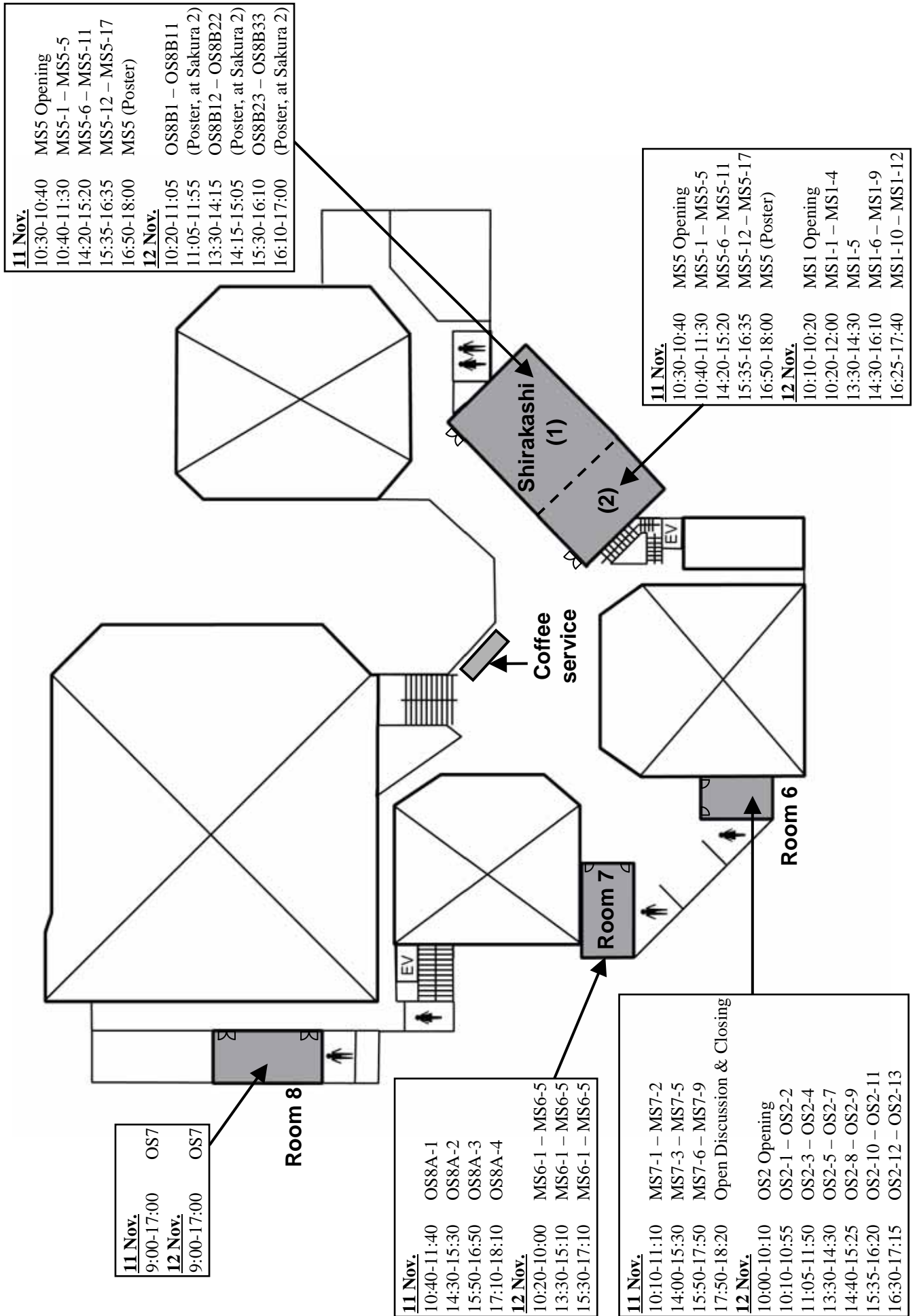
1st floor (Room 1, Room 2)



## 2nd floor (Sakura, Tachibana, Hagi, Room 4, Room 5)



### 3rd floor (Shirakashi, Room 6, Room 7, Room 8)



**Thursday, 11 November, 2004**

	Tachibana	Room1	Room4	Room5	Room6	Room7
9:00	9:00 Opening	(9:00-9:10 Opening, at "Tachibana")				
9:10-10:10	TFI Plenary Lecture J.S.Zhang	(9:10-10:10 TFI Plenary Lecture, at "Tachibana")				
10:00					10:10 MS7-1 J.-P.Bonnet (Invited)	
11:00		10:30 MS3-1 W.Yamazaki		10:20 OS5-1 H.Taniguchi (Invited)		10:40 OS8A-1 M.lima (Invited)
		10:50 MS3-2 S.Watanabe		10:40 OS5-2 T.Furukawa		
		11:10 MS3-3 H.-H.Shi		11:00 OS5-3 Y.Miura	11:10 MS7-2	
				11:20 OS5-4 S.Oshiba	J.Ausseur	
12:00	(Lunch)					
13:00	13:00-14:00 AFI Plenary Lecture K.KrishnaKumar	(13:00-14:00 AFI Plenary Lecture, at "Tachibana")				
14:00			14:00 OS3-1 O.P.Solonenko (Invited)	14:00 OS5-5 M.Yoshida (Invited)	14:00 MS7-3 A.Nishizawa	
15:00	14:10 MS2-1 I.Yamashita 14:20 MS2-2 J.E.Johnson (Invited)	14:30 MS3-4 A.J.Meade (Invited)	14:40 OS3-2 M.Tanaka	14:40 OS5-6 E.Zaretsky (Invited)	14:30 MS7-4 K.Fukagata	14:30 OS8A-2 T.Tajikawa (Invited)
	15:00 MS2-3 T.Urisu		15:00 OS3-3 Y.Tanaka		15:00 MS7-5 S.Izawa	
16:00	15:35 MS2-4 T.Ichiki		15:30 OS3-4 M.Shigeta	15:40 OS5-7 J.J.Alonso (Invited)		
	15:50 MS3-5 J.-H.Yoo	15:50 OS3-5 M.Okubo		15:50 MS7-6 T.Hayase	15:50 OS8A-3 K.Yokoi (Invited)	
	16:10 MS3-6 I.G.Lim	16:10 OS3-6 T.Sato		16:20 MS7-7 H.Higuchi		
17:00	16:25 MS2-5 T.Aoyagi	16:30 MS3-7 J.-Y.Kim		16:20 OS5-8 Y.Makino		
17:00	17:00 MS2-6 S.Yoshii		16:50 OS3-7 K.Yoshida	16:50 OS5-9 K.Kusunose (Invited)	16:50 MS7-8 H.Sato	
	17:10 MS3-8 Y.Ooba	17:10 OS3-8 M.Shams			17:20 MS7-9 R.E.A.Arndt	17:10 OS8A-4 M.Uchiumi (Invited)
18:00	17:35 MS2-7 S.Samukawa	17:30 MS3-9 T.Ozawa	17:30 OS3-9 D.Sivakumar	17:30 OS5-10 Y.Goto		
		17:50 MS3-10 G.Hashimoto	17:50 OS3-10 X.R.Zhang		17:50 MS7 Open Discussion and Closing	
		18:10 MS3-11 J.Imamura	18:10 OS3-11 H.Takana			
19:00						
20:00	(19:00- Banquet, at "Sakura 1")					
21:00						

Shirakashi 1	Shirakashi 2	Sakura 1	Sakura 2	Hagi	Room2	Room8	
(9:00-9:10 Opening, at "Tachibana")				OS7: Water Dynamics (refer to separate program)	OS7: Water Dynamics (refer to separate program)	OS7: Water Dynamics (refer to separate program)	9:00
(9:10-10:10 TFI Plenaery Lecture, at "Tachibana")							10:00
10:30 MS5 Opening							
10:40 MS5-1 C.B.Lee (Invited)							
10:50 MS5-2 H.Y.Kim							
11:00 MS5-3 N.I.Kim							11:00
11:10 MS5-4 C.Y.Lee							
11:20 MS5-5 K.Takita							
(Lunch)							12:00
(13:00-14:00 AFI Plenaery Lecture, at "Tachibana")							13:00
14:20 MS5-6 S.In							
14:30 MS5-7 W.-H.Park							
14:40 MS5-8 W.Yang							
14:50 MS5-9 H.Kobayashi							
15:00 MS5-10 J.Kim			15:00 Exhibition				15:00
15:10 MS5-11 Y.Nunome							
15:35 MS5-12 W.Kang							
15:45 MS5-13 V.K.Baev							
15:55 MS5-14 S.Kadowaki							16:00
16:05 MS5-15 W.Lee							
16:15 MS5-16 T.Hasegawa							
16:25 MS5-17 H.Kobayashi							
16:50 MS5 Poster Presentation							17:00
			18:00 MS5 Poster Presentation, Exhibition				18:00
(19:00- Banquet, at "Sakura 1")		19:00 Banquet					19:00
							20:00
							21:00

Friday, 12 November, 2004

	Tachibana	Room1	Room2	Room4	Room5	Room6
9:00	(9:00-10:00 COE Plenary Lecture, in "Hagi")					
10:00						10:00 OS2 Opening
	10:10 OS1-1 D.-H.Lee (Invited)	10:10 MS3-12 L.Parussini		10:20 OS3-12 J.D.Carlson (Invited)	10:10 OS6-1 C.Park (Invited)	10:10 OS2-1 E.Bertran (Invited)
		10:30 MS3-13 S.Pieri	10:30 OS4-1 N.Chinzei (Invited)			10:40 OS2-2 T.Takeno
11:00		10:50 MS3-14 H.-J.Kim				
	11:00 OS1-2 K.Kamo	11:10 MS3-15 M.Kanazaki	11:00 OS4-2 T.Kouchi	11:00 OS3-13 H.Yamaguchi	11:00 OS6-2 K.Fujita	11:05 OS2-3 J.Fontaine
	11:20 OS1-3 A.Nishizawa	11:30 MS3-16 K.Chiba	11:20 OS4-3 T.Kanda	11:20 OS3-14 H.Hakogi	11:25 OS6-3 Y.Miura	11:35 OS2-4 T.Abe
	11:40 OS1-4 S.Iwase		11:40 OS4-4 E.Kitamura	11:40 OS3-15 S.Sudo		
12:00	(Lunch)					
13:00						
14:00	13:30 OS1-5 S.Tatsumi	13:30 MS4-1 H.-C.Hege (Invited)	13:30 OS4-5 T.Ohtani	13:30 OS3-16 M.Motozawa	13:30 OS6-4 G.Candler (Invited)	13:30 OS2-5 Y.Kohama
	13:50 OS1-6 D.-H.Yoon		13:50 OS4-6 Y.Xilong	13:50 OS3-17 K.Shimada		14:00 OS2-6 Y.Takahashi
	14:10 OS1-7 A.Inasawa		14:10 OS4-7 K.Watanabe	14:10 OS3-18 Y.Ido		14:15 OS2-7 T.Ishizuka
			14:30 OS4-8 K.Mori		14:20 OS6-5 M.Matsui	
15:00	14:50 OS1-8 Y.Kohama	14:40 MS4-2 N.Kukimoto		14:50 OS3-19 M.Nakano	14:45 OS6-6 T.Aochi	14:40 OS2-8 S.Zhang (Invited)
	15:10 OS1-9 K.Sakurai	15:00 MS4-3 Y.Takeshima	15:10 OS4-9 S.Obata	15:10 OS3-20 T.Tshukiji		15:10 OS2-9 D.Torii
	15:30 OS1-10 K.Nishide	15:20 MS4-4 N.Sakamoto	15:30 OS4-10 H.Nakamura	15:30 OS3-21 T.Narumi	15:25 OS6-7 K.Murakami	15:35 OS2-10 N.Ohtake (Invited)
16:00		15:40 MS4-5 J.Nonaka	15:50 OS4-11 H.Sugiyama	15:50 OS3-22 Y.Matsumura	15:50 OS6-8 K.Suzuki	16:05 OS2-11 T.Takagi
		16:00 MS4-6 M.Watanabe	16:10 OS4-12 G.Masuya		16:15 OS6-9 T.Abe	
		16:20 MS4-7 I.Fujishiro			16:40 OS6 Closing	16:30 OS2-12 T.Ohana (Invited)
17:00	X					17:00 OS2-13 I.Nakamori
						17:15 OS2 Closing
18:00	X					
19:00						

