



IC H E P 2 0 0 0

**XXXth International Conference on High Energy Physics  
Osaka, Japan July 27 - August 2, 2000**

January 25, 2000

Professor xx yy  
( ID Number : 1234 )  
ABC University  
Department of Physics  
Aa, BBBB, CCCCC  
OSAKA,560-0043  
JAPAN

Dear Professor xx yy

As chairperson of the organizing committee for the XXXth International Conference on High Energy Physics, I have great pleasure in inviting you to attend the Conference which will be held in Osaka, Japan on July 27-August 2, 2000.

Enclosed is Bulletin #1 for information about the Conference. The information contained here is also available on the web site, at

**<http://ichep2000.hep.sci.osaka-u.ac.jp/>** .

You are kindly asked to register as soon as possible, and not later than **May 1, 2000**, through the above web site. Please make your own reservation for accommodation by **July 1, 2000** via the JTB web site which has a link from ours. To ensure that your first choice can be honored, we encourage you to make a hotel reservation as soon as you can. We have included in this bulletin forms for registration and hotel reservation in case you have no access to WWW.

We have received a limited amount of funding from IUPAP which will be directed toward helping attendees from developing countries. The details for application can be found in this bulletin.

Please remember your ID number given under your name, which is needed for later communication with us.

We will issue Bulletin # 2 prior to the Conference with further information and travel details.

We are looking forward to hearing from you and seeing you in Osaka.

Yours sincerely

Yorikiyo Nagashima  
Chairperson, Organizing Committee



# XXXth INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS

July 27 - August 2 , 2000, Osaka, Japan

## BULLETIN #1

The Conference will follow the tradition of the Rochester Conference series.

**PARTICIPATION IN THE CONFERENCE IS BY INVITATION ONLY.** As in previous conferences, invitations will be extended to participants nominated by the IUPAP country coordinators. The Conference is jointly organized by **Science Council of Japan** and **The Physical Society of Japan**.

### **Venue**

The Conference will take place at the **International House** (I-House) in Osaka, Japan. Registration will start at the International House on Wednesday, July 26. Parallel Sessions will be held on July 27, 28, and 29. The room allocations will be announced in the next bulletin. Plenary Sessions will be held on July 31, August 1, and 2 in the Main Auditorium of the International House.

### **Chairperson :**

Prof. Yorikiyo NAGASHIMA, ICHEP2000, Department of Physics,  
Osaka University, Osaka, Japan

### **Conference Secretariat :**

Prof. Akihiro MAKI,  
Department of Physics, Graduate School of Science, Osaka University,  
1-1 Machikaneyama, Toyonaka, Osaka 560-0043, Japan  
Fax: +81-6-6850-5561, E-mail : [ichep2000@hep.sci.osaka-u.ac.jp](mailto:ichep2000@hep.sci.osaka-u.ac.jp)

### **Conference Sponsors**

International Union of Pure and Applied Physics ( IUPAP )  
Osaka University  
High Energy Accelerator Research Organization ( KEK )

# COMMITTEES

## Local Organizing Committee

Y. Nagashima ( Osaka : Chairperson )  
Y. Kimura ( KEK )  
A. Maki ( Osaka, KEK )  
T.K. Ohsaka ( KEK )  
E. Takasugi ( Osaka )  
T. Yamanaka ( Osaka )

C.S. Lim ( Kobe )  
S. Noguchi ( Nara Women's U.)  
T. Okusawa ( Osaka City U.)  
S. Yamada ( KEK )

## International Advisory Committee

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R.J. Cashmore ( CERN )  
V.G. Kadyshvsky ( JINR )  
T. Kirk ( BNL )  
J. Peoples ( Fermilab )  
D. Saxon ( Glasgow )  
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A.K. Wroblewski ( Warsaw )

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E. Fernandez ( Barcelona )  
J.S. Kang ( Seoul )  
J. Lefrancois ( LAL )  
B. Richter ( SLAC )  
H. Sugawara ( KEK )  
A. Wagner ( DESY )  
Z. Zheng ( IHEP )

## Program Committee

T. Maskawa ( YITP : Chairperson )  
J.A. Appel ( Fermilab )  
M. Danilov ( ITEP )  
T. Eguchi ( Tokyo )  
T. Inami ( Chuo )  
S. Komamiya ( Tokyo )  
S. Kurokawa ( KEK )  
K. Nakamura ( KEK )  
R. Peccei ( UCLA )  
N. Sasao ( Kyoto )  
H. Takeda ( Kobe )

R.J. Cashmore ( CERN )  
J. Dorfan ( SLAC )  
K. Higashijima ( Osaka )  
S. Iwata ( KEK )  
T. Kugo ( Kyoto )  
C.S. Lim ( Kobe )  
M. Ninomiya ( YITP )  
N. Sakai ( TIT )  
F. Takasaki ( KEK )  
M. Yoshimura ( Tohoku )

# CONFERENCE PROGRAM

## PARALLEL SESSIONS ( July 27 ~ July 29 )

1. Hadron Spectroscopy ( Light and Heavy Quarks, Glueballs, Exotics )
2. Soft Interaction Processes ( including diffraction, two-photon, small x )
3. Hard Interactions ( High  $Q^2$  : DIS, Jet, Perturbative QCD )
4. High Energy Heavy Ion Collisions
5. Tests of the Electroweak Gauge Theory
6. Light Flavor Physics ( Kaon, Muon )
7. Heavy Flavor Physics ( Charm, Bottom, Top and Tau )
8. Neutrino Physics
9. Particle Astrophysics and Cosmology ( excluding Neutrino )
10. Beyond the Standard Model ( Theory )
11. Search for New Particles and New Phenomena
12. New Detectors and Techniques
13. Future Accelerators
14. Lattice Field Theory
15. Field Theory
16. Superstring Theory

## PLENARY TALKS ( July 31 ~ August 2 )

1. New Results from  $e^+e^-$  B-factories : BABAR , BELLE , CLEO
2. CP Violation and Rare Decays ( Kaon, Muon )
3. Heavy Flavor Physics ( Charm, Bottom, Top and Tau )
4. Flavor Dynamics
5. Lattice Field Theory
6. Precision Tests of the Standard Model
  - (a) Precision Tests of the Electroweak Gauge Theory ( W, Z, Top etc. )
  - (b) New Results from g-2 Experiment
7. Search for New Particles and New Phenomena
  - (a) Results from  $e^+e^-$  Colliders
  - (b) Results from Hadron Colliders ( including e-p )
8. Neutrino Physics
  - (a) Accelerator and Reactor Neutrino Experiments
  - (b) Non-Accelerator Neutrino Experiments
9. Beyond the Standard Model
10. Recent Progress in Field Theory
11. Hard Interaction Processes ( High  $Q^2$  : DIS, Jets )
12. Soft Interaction Processes ( Low  $Q^2$  : diffraction, two-photon and spin structure )
13. Superstring Theory
14. Future Accelerators
15. High Energy Heavy Ion Collisions
16. Experimental Particle Astrophysics
  - (a) High Energy Particles from the Universe
  - (b) Low Energy Particles from the Universe
17. Particle Physics and Cosmology
18. Summary Talk

\*\*\* **Special Evening Session ( August 1 )** \*\*\*

Research Plans in the Next Century

Directors of CERN, DESY, FNAL, KEK, SLAC

## DEADLINES

March 31, 2000	Visa Application Request
April 15, 2000	Application for Financial Support
May 1, 2000	Registration
May 1, 2000	Abstracts
July 1, 2000	Hotel Reservation
July 1, 2000	Contributed Papers

## VISA FOR ENTERING JAPAN

All foreign participants must carry a valid passport, and in many cases a visa also. Since the Japanese visa application system is very strict, anyone who needs a visa should apply early, leaving enough time for processing and any possible corrections. In some cases it takes over four months to get a visa after submitting an application. Many conference participants have failed to come because they applied for a visa too late.

You can find out whether you need a visa or not, and how to apply for it, from the home page of the Ministry of Foreign Affairs at

[http://www.mofa.go.jp/j\\_info/visit/visa/index.html](http://www.mofa.go.jp/j_info/visit/visa/index.html) .

If you are not sure, please check with the Japanese Consulate, Embassy or a travel agent. Please also check what documents are necessary, if you need to apply for a visa.

If you need a visa, some documents in Japanese may be required. In that case, please register yourself for the Conference first and then fax the "Form for Requesting Visa Application Documents" attached to this bulletin to +**81-6-6850-5561**. If fax is not available, please send a blank e-mail with the subject "visa" to

[ichepform@hep.sci.osaka-u.ac.jp](mailto:ichepform@hep.sci.osaka-u.ac.jp) ,

and follow the instructions returned to you by e-mail. We will then send you the relevant documents and prepare other paperwork necessary on our side.

The deadline for this request is **March 31, 2000**.

## ABSTRACTS AND CONTRIBUTED PAPERS

### (1) Abstracts

Anyone who wishes to give a talk at the Conference must submit an abstract by **May 1, 2000**. The abstracts will be used to select topics to be presented at the parallel sessions. To submit abstracts, please go to the web page at

<http://ichep2000.hep.sci.osaka-u.ac.jp/>

and follow the instructions. We accept text-files only. We do **NOT** accept dvi-files, pdf-files or ps-files. All abstracts received before the deadline will be passed on to the conveners of the appropriate parallel sessions and the rapporteurs of the relevant plenary sessions.

If WWW submission is not possible, please send a blank e-mail with the subject "abstract" to

[ichepform@hep.sci.osaka-u.ac.jp](mailto:ichepform@hep.sci.osaka-u.ac.jp) ,

and follow the instructions returned to you by e-mail. Note that we do not accept abstracts

sent by fax or ordinary mail.

The organizing committee will not make any abstracts publicly available before the Conference. They will be transferred to conveners and rapporteurs only.

## (2) Contributed Papers

To submit full papers, please go to the web page at

<http://ic hep2000.hep.sci.osaka-u.ac.jp/>

and follow the instructions to send us the Los Alamos archive numbers. Please do not send us the actual papers. The deadline for submission is **July 1, 2000**. The Los Alamos archive numbers of the papers contributed before the deadline will be passed on to the rapporteurs of appropriate plenary sessions.

## PROCEEDINGS

Proceedings will be published by World Scientific. Copies of the talk transparencies will be accessible via the Conference web site.

## REGISTRATION

All invitees are asked to register as soon as possible and **no later than May 1, 2000**.

Please register electronically, if possible, via our web site at

<http://ic hep2000.hep.sci.osaka-u.ac.jp/>

A registration form is enclosed in this bulletin for those who have no access to WWW. The invitees who are unable to attend the Conference are asked to notify the ICHEP2000 Secretariat, in order to allow us to extend invitations to other delegates.

The registration fee for a participant, if paid **by May 1, 2000**, is ¥40,000 ( Japanese Yen, ¥100 = US\$ 0.90 ~ 0.95 ) which includes:

- conference pack
- admission to all scientific sessions
- a banquet on July 31 at the Hotel New Otani
- one set of proceedings

The fee for the registration received **after May 1, 2000** is ¥45,000.

## PAYMENT

Payment can be made by the following credit cards; **VISA, MASTERCARD, DINERS, JCB, and AMEX**. The card payment is handled by JTB ( Japan Travel Bureau ). Bank Check and Money Order payable to ICHEP2000 are also accepted, but only in Japanese Yen.

## CANCELLATION AND REFUNDS

In case of a cancellation received in writing by the ICHEP2000 Secretariat **by July 15, 2000**, the registration fee ( less ¥3,000 cancellation charge ) will be refunded.

Cancellation by e-mail is not accepted. No refund is made for cancellations received **after July 15, 2000**.

## FINANCIAL SUPPORT

Through financial help from IUPAP, the Conference organizers will be able to assist a limited number of scientists from developing countries or regions, by providing support for the following local expenses:

- waiver of the conference fee
- living expenses during the conference
- accommodation

Please note that participants are expected to cover their own travel expenses.

Applications for financial support must reach the ICHEP2000 Secretariat no later than **April 15, 2000**, together with one letter of recommendation.

## ACCOMMODATION

Arrangements have been made by JTB ( Japan Travel Bureau ) for a wide variety of accommodation to be available in downtown Osaka. Please reserve your hotel via the JTB web site, which has a link from ours. If you cannot access to WWW, please use the reservation form attached to this bulletin. Although the deadline is **July 1, 2000**, you are encouraged to make a hotel reservation as early as you can so that your first choice can be honored. Please note that **all participants are requested to make their own reservation directly with JTB**. The Conference secretariat does not handle accommodation.

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### Footnote

To secure IUPAP sponsorship, the organizers have provided assurance that ICHEP2000 will be conducted in accordance with IUPAP principles as stated in the ICSU Document *Universality of Science* ( 6th edition, 1989 ) regarding the free circulation of scientists for international purposes. In particular, no *bona fide* scientists will be excluded from participation on the grounds of national origin, nationality, or political considerations unrelated to science.

## **SOCIAL PROGRAMS**

The following two social events are arranged for all the participants and accompanying persons free of charge.

(1) July 27 19:00-20:30

" **Bunraku** - The traditional Japanese puppet play "

With hundreds of years of history 'Bunraku' has reached a high level of sophistication. It takes three puppet players to handle each puppet! ( You can see a Bunraku-puppet on the poster of ICHEP2000.) The art of Bunraku will make you believe the puppets are alive, dominating the stage, and you will be drawn into the world of Bunraku-puppets.

(2) July 29 19:00-20:30

"**An evening of Japanese music**"

Hiroyuki KOINUMA, Yumiko KANEKO and Mikio TSUJI will play Japanese music. KOINUMA and KANEKO are prominent Japanese flute ( "Shinobue" and "Nokan" ) players and TSUJI is a prominent guitarist who plays a guitar with 11 strings. These three musicians often play together. Japanese music is somewhat different from Western music. The deviation from exact pitch and exact tempo is the main technique for its sophisticated expression. You will find the music very charming.

## **PUBLIC LECTURE Sunday, July 30, 2000**

Professor Jerome Friedman ( MIT ) will give a public lecture for a general audience in the afternoon of Sunday, July 30. The title is "Are we really made of quarks?". Anyone interested is welcomed to attend.

## **EXCURSIONS Sunday, July 30, 2000**

Four bus tours are planned by JTB as one-day excursions. All prices include lunch except Tour 4 and admissions. Note that a tour may be canceled if the number of participants is not enough to form the tour.

(1) One-day excursion in **OSAKA** ( 9:00 - 16:00 ) : ¥7,500

Visiting places:

- KAIYU-KAN, Osaka Aquarium :

One of the largest aquariums in the world with some 35,000 sea animals covering 580 species.

- OSAKA CASTLE :

Famous for its magnificence and the immense stone walls.  
The castle is loved as a symbol of Osaka.

(2) One-day excursion to **KYOTO** ( 9:00-18:00 ) : ¥7,500

Kyoto is the second oldest Capital City of Japan ( 794 - 1869 ).

Visiting places:

- KINKAKU-JI TEMPLE ( GOLDEN PAVILION )

Very famous for its celebrated Golden Pavilion.

- NIJO CASTLE

Built in 1603 by the Tokugawa Shogun ( The World Heritage ).



- KIYOMIZU TEMPLE  
Famous for its sweeping view of Kyoto from the terrace ( The World Heritage ).
  - HEIAN SHRINE  
Famous Japanese Shinto-Shrine dedicated to the Emperor who founded Kyoto as the second Capital City of Japan.
- (3) One-day excursion to **NARA** ( 9:00-17:00 ) : ¥8,000  
Nara is the oldest Capital City of Japan and is loved as the spiritual homeland of Japan.  
Visiting places:
- HORYU-JI TEMPLE  
Its main hall and the five-storied pagoda are said to be the oldest wooden structures in the world. ( The World Heritage )
  - TODAI-JI TEMPLE  
The Great Buddha's Image (15 m-high bronze statue ) is seen in the largest wooden hall in the world. ( The World Heritage )
  - KASUGA SHRINE  
The most famous and beautiful Shinto Shrine in Nara. ( The World Heritage )
  - NARA PARK ( deer park )  
More than 1000 deer roam freely on 1200 acres of green grass.
- (4) One-day excursion to the **Festival " WASSHOI! 2000"** ( 9:00-17:00 )  
: ¥4,000 ( admissions included, lunch NOT included )
- OSAKA CASTLE ( See ( 1 ) )
  - SAKAI CITY: "WASSHOI! 2000" FESTIVAL  
Enjoy the World Performing Arts Festival 2000. ( 3 hours )  
Lunch can be purchased in the festival.

## **ACCOMPANYING PERSONS PROGRAM**

The Local Organizing Committee provides Volunteer-based programs for accompanying persons.

- (1) Introductory classes for Japanese Culture and Tradition.  
You may enjoy classes with volunteers who will introduce you to Japanese Culture and Tradition.  
The lessons are :
- Tea Ceremony ( July 27 )
  - Japanese Flower Arrangement ( July 29 ).
- (2) Special Tour to Osaka Castle ( July 28 )  
A special tour to Osaka Castle is arranged for accompanying persons. The tour visits two original turrets of the Castle built in 1620 which are normally closed to the public. The tour also includes a visit to the restored Keep ( Castle Tower ) which is now a museum. A special short lecture on the history of the castle will be provided. The capacity is two groups of 50 persons each.

(3) A tour in the Nara area for a small group ( August 1 )

You may enjoy Nara area with volunteers from Nara Women's University ( NWU ).

- KOTO ( Japanese harp ) concert by students from NWU.
- Walking around Nara Park ( Todaiji-Temple, Kasuga-Shrine ).

Note 1 )

The numbers of attendants for these programs are limited.

Details will be announced in the Second Bulletin.

Note 2 )

JTB also provides you with various social programs independently.

For more details, see JTB web site.

## **BANQUET Monday, July 31, 2000**

A banquet will be held in the evening of July 31, 2000 at the Hotel New Otani. One ticket is included in the registration fee. Additional tickets for your family and friends can be purchased for ¥5,000 each at the time of registration. Children under 12 are free.

## **GENERAL INFORMATION**

### **about Osaka**

As Japan's oldest city with a history of 1,500 years, Osaka has much to offer to today's visitors; the lively Kita and Minami amusement districts, a rich variety of sporting and cultural facilities, abundant shopping and dining opportunities. Osaka is the largest commercial center in the west part of Japan and also a convenient stepping-off point for visiting Kobe, Kyoto and Nara.

### **Conference Site**

The Conference Site is the "International House, Osaka" which is situated in the central region of Osaka City on the Uemachi-Daichi hill. There are many interesting places near by ; the Shitenno-Ji temple ( the first temple founded in Japan, within 1km ), Shinsai-Bashi / Doton-Bori ( Shopping, cinema, restaurants, a flood of neon signs in Minami district, within 2.5km ), Osaka-Jyo castle ( within 3km ) and the "History Promenade path" on the Uemachi-Daichi hillside, and other attractions.

### **Climate**

Summer in the Osaka area is hot and humid. The temperature often goes up to 34° C ( 90° F ) in the daytime. However, conference rooms and hotels, as well as buses and railway passenger coaches, are generally well air-conditioned. Rainfall is unlikely during summer, but there is a slight chance of typhoons with heavy rain.

### **Air Transportation**

The most convenient way to come to Osaka is to fly to Kansai International Airport ( KIX ). There are many international carriers which fly directly to the airport from major cities all over the world. There are limousine buses ( ¥880 ~ ¥1,300 ) and trains ( ¥1,400 ) which go directly to the downtown Osaka in 1 hour.

Other possibilities are to fly to Narita Airport ( NRT ) or Fukuoka ( FUK ), and then fly

to Osaka Itami Airport ( OSA/ITA ) or Kansai International Airport. There are also limousine buses available from Itami Airport to the downtown area. However, it should be noted that the number of domestic flights between Narita and Osaka are limited.

More details on the transportation from the airports to the hotels and the Conference site will be available in the Second Bulletin and on our web page.

### **Ground Transportation**

The conference hotels in downtown Osaka are within at most a 10 minute subway-ride plus approximately a 10 minute walk from the International House, where the Conference is held. It is strongly recommended to use the subway due to heavy surface traffic. No arrangement is made for a shuttle service between the Conference site and the hotels.

### **Currency**

ATM cashing service for credit cards is not generally available in Japan. Participants are recommended to exchange their cash or travelers' checks to Japanese Yen before departure from their country or upon arrival at the airport.

As of now, some foreign currencies such as Korea Won, Taiwan Dollars, China Yuan Renmimbi, Philippines Pesos, and India Rupees are not accepted even at Kansai International Airport. People from those countries should get Japanese Yen or US Dollars before departing from their country. More information will be supplied in the Second Bulletin and our web site.

Over the last year the exchange rate has been US\$ 1.00 =¥105 ~110.