

International Symposium on
**Hadron Spectroscopy, Chiral Symmetry
and
Relativistic Description of Bound Systems**

*24(Mon), 25(Tues), 26(Wed) February 2003
Nihon Daigaku Kaikan, Ichigaya, Tokyo*

Purpose:

As regards level-classification of hadrons there exist two contrasting, non-relativistic and relativistic, viewpoints. The former has been a base for the PDG level-classification scheme adopted for the last 4-decades. The property of π -meson as a Nambu-Goldstone boson associated with spontaneous breaking of chiral symmetry gives a support on the latter. Recently existence of the light-mass iso-scalar scalar meson, which has been controversial for many years, is widely accepted; as a matter of fact, all speakers in the workshop “ σ -Meson 2000” (Kyoto) “took the light σ for granted”. It also appears as “ $f_0(600)$ or σ ” in the newest edition of PDG list.

Physical implication of the existence of σ is important and it gives further support to the relativistic view. Thus, the hadron spectroscopy is now being confronted with a serious problem in unifying the above two contradictory viewpoints. For solving this, it seems necessary to pursue the relativistic viewpoint in a more basic level, such as a covariant description of bound systems with chiral symmetry being taken into account. The purpose of this symposium is to review the present situation on the hadron spectroscopy and to find a clue to its further development.

Subjects and Topics:

- [Properties and Spectra of Mesons in Lower Mass Region]
 - Problems of low mass meson spectroscopy and exotic mesons
 - Spectra of heavy/light quark mesons
 - Indications of σ , κ -mesons in production processes
 - Physical implications of existence of σ -nonet
 - Quark configurations and properties of scalar mesons
 - Scalar mesons in lattice calculations
- [Low Mass Baryon Spectra and Chiral Symmetry]
 - Observed baryon resonances in BES experiment

Baryon spectroscopy in $SU(6)$ and its problems

Baryon mass spectra in lattice calculations

Chiral symmetry in baryon systems

- [Level Classification Scheme and History of Symmetry]

History of symmetry in composite particle systems

$\tilde{U}(12)$ symmetry in hadron spectroscopy and its phenomenology

Chiral particles in heavy-light quark meson systems

- [Relativistic Approaches to Bound Systems]

Bi-local theories and constraint dynamics

Quark-confined effects and form factors

BS equation/NJL model approach

QCD approach to hadrons

Field theory of unstable particles

Speakers: (* to be confirmed)

Weiguo Li, Ning Wu, Z. Zheng, B. S. Zou(IHEP, Beijing);
N. A. Törnqvist(Helsinki), N. N. Achasov(Novosibirsk), S. Olsen(Hawaii),
A. Zaitsev(IHEP, Protvino), *Eidelman(Russia), S. F. Tuan(Hawaii),
C. Göbel(Fermilab), E. Swanson(Pittsburgh), H. W. Crator(Tennessee),
K. Takamatsu, T. Tsuru(KEK); S. Sasaki(Tokyo); T. Kunihiro, S. Tanaka,
N. Nakanishi(Kyoto); A. Nakamura(Hiroshima), M. Oka, M. Ishida(TITech);
*D. Jido(RCNP), Y. Ohnuki(Nagoya), *S. Kamefuchi(Tsukuba),
S. Ishida, S. Naka, K. Yamada(Nihon); M. Oda(Kokushikan),

Committee:

Advisers: H. Kobayashi, H. Sugawara, S. Kamefuchi, S. Tanaka, K. Igi
Y. Ohnuki, T. Sawada, M. Oka, T. Kunihiro, M. Ishida

Organizers: Nihon University S. Ishida(*Chair*), S. Y. Tsai, S. Naka,
S. Deguchi, M. Obu, K. Yamada

KEK K. Takamatsu(*Chair*), T. Tsuru, K. Ukai

Scientific secretaries: S. Y. Tsai(*Director*), T. Nihei, H. Toyoda,
T. Komada, T. Maeda

Sponsorship:

Institute of Quantum Science, Nihon University.

Hight Energy Accelerator Research Organization(KEK)

Tentative Schedule:

23(Sun) Evening	Registration
24(Mon)	Registration, Symposium
25(Tue)	Symposium + Banquet
26(Wed)	Symposium

Registration:

All participants are requested to register. The registration fee for general participants will be 10,000 Yen for general participants and 5,000 Yen for students. The fee covers the banquet on Tuesday and refreshments at breaks during the symposium. The payment should be made at the registration desk in Japanese Yen only.

A banquet will be held in the evening of 25(Tue). All participants and accompanying persons will be invited to enjoy meal and drinks.

Those who would like to attend the Symposium (including the invited speakers) are requested to complete the Registration Form attached and send it back via email, fax or air mail by November 15(for foreign participants who need to apply for a visa) or December 15 (for other participants) to the Director of the Symposium (the addresses and the fax number are shown at the end of this Circular).

Contributions and Proceedings:

The symposium will consist mainly of the invited talks. Contributed papers are also welcome. Those who would like to contribute a paper, as well as invited speakers are requested to append his Registration Form with the title and abstract of the paper. The final decision of the program will be made by the end of this year 2002.

Proceedings of the symposium will be published in a series of KEK-proceedings/2003.

Conference Site and Accommodations:

The workshop site (Nihon-Daigaku-Kaikan at Ichigaya, Tokyo) and the hotel (Archadia Ichigaya) for attendants from abroad are conveniently located in the central Tokyo. Both are within a few minutes walk from Ichigaya Station on JR Sobu line or Subway.

From Narita International Airport you can take Keisei line (Limited Express or Skyliner: Skyliner is faster and more comfortable but costs 1,000yen more) get to Nippori. Transfer there to JR Yamanote line to get to Akihabara, where you transfer again to Sobu line (Local), then Ichigaya is the fourth stop.

Alternatively, you can take JR Rapid Service or "Narita Express" to Tokyo Station, where you transfer to JR Chuo line. Transfer once more at the second stop Ochanomizu to Sobu line to get to Ichigaya, which is the third stop is Ichigaya. See also the map on the web page (<http://aries.phys.cst.nihon-u.ac.jp/symp03>).

Post-symposium Workshop on hadron spectroscopy and chiral particle search in J/Ψ decay data at BES will be held at KEK on 28(Fri) and 1(Sat) March.

For Further Information, please contact:

S. Y. Tsai (Director of the symposium)
College of Science and Technology, Nihon University
8-14, Kanda-Surugadai 1-chome, Chiyoda-ku, Tokyo 101-8308, Japan
Phone: +81-3-3259-0867 Fax: +81-3-3259-0899
E-mail: iqs-symp03@phys.cst.nihon-u.ac.jp

———— Registration Form for attendants from Abroad ————

Deadline: for participants who need visa,

November 15. :for the others, December 15

Family Name :

First Name :

Date of birth : Age :

Passport number :

Affiliation and Title :

Country :

Institute Address :

FAX :

E-mail :

Phone :

Home Address :

Accommodation: Do you need a hotel reservation by us ? Yes/No

In case Yes, From (Evening) to (Morning)

Number of accompanying persons :

If you have additional requests, please state here :

CONTRIBUTIONS:

If you wish to give a presentation,
please inform us of your title and its abstract.

Title :

Abstract : (within approximately 200 words)

———— Registration Form for attendants from Japan ————

国内参加者の登録 (〆切 1 2 月 1 5 日)

氏名 :

所属及び資格 :

勤務先住所 :

自宅住所 :

電話番号 :

ファクス番号:

E-mail :

(宿舎のご予約はご自分で行っていただくようお願いいたします。)

講演ご希望の方は

講演タイトル (英文)

アブストラクト