

超冷中性子国際会議の案内

2010年4月8から9日に大阪大学核物理研究センター(RCNP)で超冷中性子の国際会議が行われます。

この国際会議 UCN2010 は、2002年に外国人を交えて KEK で開かれた中性子基礎物理研究会を発端に、2005年 RCNP での国際超冷中性子研究会、2007年 TRIUMF での UCN workshop を経て発展してきたものをベースにしております。世界の第一線で活躍されている多数の研究者にお出で頂き、超冷中性子と関連の物理について議論されます。ふるってご参加くださるようお願いいたします。

参加登録

御氏名:

所属:

E-mail address :

電話:

宿舎: 必要、不要

必要な場合

到着日:

出発日:

旅費: 必要、不要

RCNP から旅費援助も頂いております。旅費等、必要な方はご記入をお願いします。(旅費に限りがありますので、すべての方にお出しできない場合もありますので、ご容赦くださるようお願いいたします。)

The final circular for
International Workshop on “UCN and Fundamental Neutron
Physics” UCN2010, RCNP, Japan, April 8-9, 2010

Draft of Program Agenda

April 8

9:00 Opening address

Tadafumi Kishimoto (RCNP director)

9:10 **UCN source**

9:10 Kichiji Hatanaka (RCNP)
“KEK-RCNP UCN source”

9:40 Jeffery Martin (Winnipeg)
“UCN project at TRIUMF”

10:10 Christopher Morris (Los Alamos)
“The Los Alamos UCN Source”

10:40~10:50 Break

10:50 Manfred Daum (PSI)
“R & D experiments for the PSI UCN source”

11:20 Bertrand Blau (PSI)
“The new ultracold neutron source at PSI: status and first results from commissioning”

11:50 Anatoly Serebrov (PNPI)
“Project of UCN sources at PNPI and program of Fundamental Neutron Physics”

12:20 Ekaterina Korobkina (North Carolina)
“PULSTAR UCN source and some applications to material study”

12:50~14:00 Lunch

14:00 Chen-Yu Liu (Indiana)
“Coherent neutron scattering and its implications to UCN production”

14:30 Hirohiko Shimizu (IMSS, KEK)
“Production of ultracold neutrons at J-PARC (J-PARC P33)”

14:45 Masaaki Kitaguchi (Kyoto)
“Neutron rebuncher for pulsed ultracold neutrons”

15:00~15:10 Break

15:10 **Beta decay**

- 15:10 J.D. Bowman (Oak Ridge)
"Neutron Beta Decay"
- 15:40 Alexander Saunders (Los Alamos)
"Neutron Beta Decay Measurements at LANL: UCNA, UCNB,
and UCNb"
- 16:10 Oscar Naviliat (Caen)
"Measurement of the neutron lifetime with magnetically stored
UCNs"
- 16:40 Alexey Fomin (PNPI)
"Monte Carlo simulation of the neutron lifetime experiment by
storing ultracold neutrons with detection of inelastically
scattered neutrons"
- 17:00 End of session
- 18:00 Dinner Party

April 9

- 9:00 **EDM**
- 9:00 Adam Ritz (Victoria)
"Probing new CP-odd physics with EDMs"
- 9:40 Yasuhiro Masuda (IPNS, KEK)
"nEDM at a He-II spallation UCN source"
- 10:10 Robert Golub (North Carolina)
"nEDM"

10:40~10:50 Break

- 10:50 Peter Geltenbort (ILL)
"nEDM at ILL"
- 11:20 Guillaume Pignol (TU Munchen)
"The neutron electric dipole moment search at PSI"
- 11:50 Koichiro Asahi (TIT)
"Experimental search for an EDM in ^{129}Xe atom"
- 12:20 Yasuhiro Sakemi (Tohoku)
"Search for permanent electric dipole moment in Francium"

12:50~13:50 Lunch

13:50 UCN source tour

15:00 ***UCN physics and related physics***

15:00 Vladimir Gudkov (South Carolina)

“UCN and Exotic Interactions”

15:30 Valery Nesvizhevsky (ILL)

“Centrifugal and gravitational quantum states of neutrons”

16:00 Willem T.H. van Oers (TRIUMF/Manitoba)

“Electroweak Tests of the Standard Model”

16:30 Vladimir Ignatovich (JINR)

“Reflection of neutrons from a magnetic mirror with helicoidal magnetization and a dispute with APS of USA on linear algebra”

17:00 Ryohei. Matsumiya (Osaka)

“UCN storage experiment”

17:20 Tamaki Yoshioka (IMSS, KEK)

“A novel technique to increase the UCN density for J-PARC UCN source”

17:35 Kenji Mishima (IMSS, KEK)

“A Doppler shifter for a pulsed neutron source at J-PARC/MLF”

17:50 Closing Remark

18:00 End of workshop

Access to the workshop site:

Osaka has two airports, one is Kansai (KIX), the other Itami. If you use a flight to Kansai, you can use train/bus services to come to RCNP. It will take 2 hours.

If you use a flight to Tokyo (Narita) and a connection flight from Narita to Itami, you can use mono-rail services from Itami to RCNP. From Itami it will take about 1 hour. From Narita you have another

choice to use train services to Osaka via Tokyo. These train services will take about 6 hours.

Access to

RCNP, <http://www.rcnp.osaka-u.ac.jp/eng/access/index.html> .

Access to Osaka University (RCNP is in Suita Campus) is also useful, <http://www.osaka-u.ac.jp/en/access> .

Bus services between Kansai and Itami airports,

http://www.kate.co.jp/pc/e_time_table/e_osaka_kuko.html .

Organizing committee:

Yasuhiro Masuda (IPNS KEK), Kichiji Hatanaka (RCNP, Osaka),

Kensaku Matsuta (Osaka), Jeffery Martin (Winnipeg)