SECOND ANNOUNCEMENT

The International Conference on Strongly Coupled Coulomb Systems (SCCS-2005) will be hosted by the Russian Academy of Sciences and will be held in Moscow, June 20-25, 2005. The conference location is the Building of Presidium of the Russian Academy of Sciences.

Conference Scope

Strongly Coupled Coulomb Systems represent a wide range of physical states that are all many-body systems characterized by strong long-ranged interactions. Topics of particular interest for SCCS-2005 include:

- General statistical physics of Coulomb systems
- Thermodynamic properties
- Transport and optical properties
- Phase transitions in Coulomb systems
- Kinetic theory and ionization processes
- Bound states
- Astrophysical plasmas: physics of the Sun, planetary and stellar interiors
- Dusty plasmas, charged colloids
- High energy density plasmas
- Plasmas generated by strong shock waves
- Plasmas generated by intensive ion, electron and laser beams
- Rydberg matter
- Chemically reactive plasmas
- Ionic liquids and electrolytes
- Liquid metals and metal vapors
- Plasma in metals and semiconductors
- Electron-hole plasmas
- Cryogenic and ultracold plasmas
- Non-neutral plasmas
- Nanostructures
- Bilayers
- Charges in bubbles
- Quantum and classical Monte-Carlo, molecular dynamics etc.

Organizers

- Russian Academy of Sciences
- Ministry of Education and Science of the Russian Federation
- Russian Foundation for Basic Research
- Moscow Committee of Science and Technologies
- Institute for High Energy Densities
- Moscow Institute of Physics and Technology
- Russian Joint Stock Company "Unified Energy System of Russia"

Sponsors

- Russian Academy of Sciences
- Russian Joint Stock Company Unified Energy System of Russia
- Ministry of Education and Science of Russian Federation
- Russian Foundation for Basic Research
- Moscow Committee of Science and Technologies
SCCS International Advisory Board

Kenneth Golden (chair) USA  James Dufty USA  David Neilson Belgium
Angel Alastuey France  Werner Ebeling Germany  Gren Patey Canada
David Andelman Israel  Vladimir Filinov Russia  Francois Peeters Belgium
Neil W. Ashcroft USA  Michael Fisher USA  David Pines USA
John Bollinger USA  Vladimir Fortov Russia  Gerd Roepke Germany
Jean-Michel Caillol France  Jean-Pierre Hansen UK  Marlene Rosenberg USA
David M. Ceperley USA  Friedrich Hensel Germany  Sankar Das Sarma USA
Gilles Chabrier France  Gabor Kalman USA  Manfred Schlanges Germany
Jean Clerouin France  Walter Kohn USA  Gaetano Senatore Italy
Alan DeSilva USA  Hartmut Lowen Germany  Hiroo Totsuji Japan
Hugh DeWitt USA  Gennadii Mesyats Russia  Jon Weisheit USA
Dan Dubin USA  Gregor Morfill Germany

Local Organizing Committee (LOC)

Vladimir Fortov chairman  Oleg Petrov  Genri Norman
Vladimir Vorob’ev vice-chairman  Yury Lebedev  Alexander Khomkin
Igor Morozov secretary  Victor Mintsev  Konstantin Khishchenko
Valery Sultanov secretary  Edward Son  Pavel Levashov
Vladimir Efremov  Igor Iosilevskiy  Sergey Kravchenko
Genri Norman  Nikolay Shilkin

Program Committee

Kenneth Golden (chair) USA  James Dufty USA  Vladimir Fortov Russia
Jean Clerouin France  Gabor Kalman USA  Genri Norman Russia
John Bollinger USA  Sankar das Sarma USA

Scientific Program

The scientific program of the Conference will consist of 12 invited plenary talks (45 minutes), 25 invited topical talks (30 minutes), ordinary oral presentations (20 minutes) and poster section. The official language of the Conference is English. The list of the invited plenary speakers is given below:

M. Barbosa  Univ. of Porto Alegre, Brazil  Charged DNA beyond mean field theory;
G. Chabrier  Lyon, France  Review of recent results in astrophysical plasmas applied to giant planets, white dwarfs, and neutron stars;
D. H. E. Dubin  UCSD, La Jolla, USA  Recent results with strongly coupled ion plasmas;
W. Ebeling  Humboldt University, Berlin, Germany  The method of effective potentials in the quantum statistical theory of plasmas;
V. Filinov  IHED RAS, Moscow, Russia  Monte-Carlo simulations of dense quantum plasmas;
M. Fisher  University of Maryland, USA  Criticality in ionic systems;
F. Hensel  Philipps-Univ., Marburg, Germany  Liquid metals;
H. M. Thomas  Munich, Germany  Dusty plasmas: theory and experiment;
G. A. Mesyats  RAS, Moscow, Russia  Strongly coupled plasma in the near-cathode region;
V. B. Mintsev  IPCP RAS, Chernogolovka, Russia  Dense plasmas equation of state and transport properties;
G. Senatore  University of Trieste, Italy  Understanding the spin susceptibility of the 2D electron gas in real devices;
A. N. Starostin  TRINITY, Troitsk, Russia  Corrected EOS of weakly non-ideal plasmas without mysteries.
Accommodation

A varied range of accommodation is available in the neighborhood of the Conference site (Leninsky prospekt, 32a). Preferred is the hotel “Sputnik” (www.hotelsputenik.ru). To reserve a room for a special rate, please contact us by e-mail sccs2005@ihed.ras.ru.

For other accommodation possibilities visit the web page www.ihed.ras.ru/sccs2005/accomodation. To reserve a room for a special rate, please contact directly the official tour operator of the Conference (International Ecology Fund-Traveller, Director: Zakharova Olga, e-mail: meftra@kks.com.ru) or the Local Organizing Committee.

Social Events

• Welcome party is planned to be held aboard a comfortable ship which will give a wonderful opportunity to see the historical sites on scenic banks of the Moskva-river.
• Moscow sightseeing bus tour will include visiting the Red Square, Cathedral of Christ the Savior, memorial complex on Poklonnaya Gora, panorama of Moscow from Vorob’yovi Gori.

Additional information about social events is available at www.ihed.ras.ru/sccs2005/cultprog.

Visa Application

If you need a visa to visit Russia, please contact the LOC providing the following information: date and place of birth, nationality, city and address of the embassy where you are going to apply for visa, the dates of your visit and copy of the first page of your passport with the passport number and issue/expiration dates.

Deadlines

Abstract submission March 31, 2005
Acceptance notification April 20, 2005
Registration fee payment May 1, 2005
Final program June 1, 2005
Publication of full papers August 31, 2005

Abstract Submission

One-page abstracts should be submitted electronically via web site www.ihed.ras.ru/sccs2005/abstracts. No submission by e-mail is available. Abstracts should not contain figures.

For information please contact us by e-mail sccs2005@ihed.ras.ru.

Correspondence and Information

LOC secretaries
Dr. Igor Morozov and Dr. Valery Sultanov
Institute for High Energy Densities RAS
Izhorskaya 13/19, Moscow 125412, Russia
Tel: +7 (095) 484 2456
Fax: +7 (095) 485 7990
E-mail: sccs2005@ihed.ras.ru

Chairman Prof. Vladimir Fortov
Phone: +7 (095) 485 7988

Director: Zakharova Olga
Leninsky Prospekt, 42/3, office 3233, Moscow 119119, Russia
Tel: +7 (095) 938-73-19, 938-73-95
Fax: +7 (095) 137-06-36, 930-99-56
E-mail: meftra@kks.com.ru
Registration Form
International Conference on Strongly Coupled Coulomb Systems (SCCS-2005)
June 20–25, 2005, Moscow, Russia

First Name __________________________ Last Name __________________________ □ Mr. □ Ms.

Title __________ Affiliation _________________________________________________

Position __________ Address _________________________________________________

City __________ State __________ Zip __________ Country __________

Telephone __________ Fax __________ E-mail __________

Accompanying persons _________________________________________________

CONFERENCE FEES
Registration fee 450 Euro
Student’s fee 150 Euro
Accompanied persons 250 Euro

Conference fee includes the Conference abstracts, coffee breaks, welcome reception and the Moscow sightseeing bus tour.

METHOD OF PAYMENT
Please transfer registration fees to the following bank account of the official tour operator of the Conference (IEF-Traveller):

Beneficiary IEF-Traveller
Beneficiary’s accont 40702 978 9 0460 0000003
Beneficiary’s bank ALFA BANK Moscow
S.W.I.F.T. ALFARUMM

Correspondent bank of beneficiary’s bank Commerzbank Frankfurt/Main
S.W.I.F.T. COBA DE FF
Account at the correspondent bank 4008868945/01

Please fill in this form via the web site http://www.ihed.ras.ru/sccs2005/registration
or submit it by e-mail sccs2005@ihed.ras.ru or Fax +7 (095) 485 7990
before May 1, 2005.