

# INTERNATIONAL CONFERENCE ON STRONGLY COUPLED COULOMB SYSTEMS

**June 20-25, 2005**

**Moscow, Russia**

<http://www.ihed.ras.ru/sccs2005>



## 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 of Problems of Chemical Physics
- 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

<b>Kenneth Golden (chair)</b>	USA	James Dufty	USA	David Neilson	Belgium
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## Local Organizing Committee (LOC)

<b>Vladimir Fortov</b>	<b>chairman</b>	Oleg Petrov	Genri Norman
Vladimir Vorob'ev	vice-chairman	Yury Lebedev	Alexander Khomkin
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			Nikolay Shilkin

## Program Committee

<b>Kenneth Golden (chair)</b>	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	<i>Univ. of Porto Alegre, Brazil</i>	Charged DNA beyond mean field theory;
G. Chabrier	<i>Lyon, France</i>	Review of recent results in astrophysical plasmas applied to giant planets, white dwarfs, and neutron stars;
D. H. E. Dubin	<i>UCSD, La Jolla, USA</i>	Recent results with strongly coupled ion plasmas;
W. Ebeling	<i>Humboldt University, Berlin, Germany</i>	The method of effective potentials in the quantum statistical theory of plasmas;
V. Filinov	<i>IHED RAS, Moscow, Russia</i>	Monte-Carlo simulations of dense quantum plasmas;
M. Fisher	<i>University of Maryland, USA</i>	Criticality in ionic systems;
F. Hensel	<i>Phiipps-Univ., Marburg, Germany</i>	Liquid metals;
H. M. Thomas	<i>Munich, Germany</i>	Dusty plasmas: theory and experiment;
G. A. Mesyats	<i>RAS, Moscow, Russia</i>	Strongly coupled plasma in the near-cathode region;
V. B. Mintsev	<i>IPCP RAS, Chernogolovka, Russia</i>	Dense plasmas equation of state and transport properties;
G. Senatore	<i>University of Trieste, Italy</i>	Understanding the spin susceptibility of the 2D electron gas in real devices;
A. N. Starostin	<i>TRINITY, Troitsk, Russia</i>	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.hotelsputnik.ru](http://www.hotelsputnik.ru)). To reserve a room for a special rate, please contact us by e-mail [sccs2005@ihed.ras.ru](mailto:sccs2005@ihed.ras.ru).

For other accommodation possibilities visit the web page [www.ihed.ras.ru/sccs2005/accomodation](http://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](mailto: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](http://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](http://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](mailto:sccs2005@ihed.ras.ru).

## Correspondence and Information

### LOC secretaries

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**Chairman Prof. Vladimir Fortov**

**Phone: +7 (095) 485 7988**

**Official tour operator of the Conference: International Ecology Fund-Traveller (IEF-Traveller)**

**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](mailto: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	<b>450 Euro</b>
Student's fee	<b>150 Euro</b>
Accompanied persons	<b>250 Euro</b>

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	<b>IEF-Traveller</b>
Beneficiary's account	<b>40702 978 9 0460 0000003</b>
Beneficiary's bank	<b>ALFA BANK Moscow</b>
S.W.I.F.T.	<b>ALFARUMM</b>
Correspondent bank of beneficiary's bank	<b>Commerzbank Frankfurt/Main</b>
S.W.I.F.T.	<b>COBA DE FF</b>
Account at the correspondent bank	<b>4008868945/01</b>

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](mailto:sccs2005@ihed.ras.ru) or Fax +7 (095) 485 7990  
before **May 1, 2005**.