# Russian Gravitation Society Ulyanovsk State Pedagogical University Centre for Gravitation and Fundamental Metrology, VNIIMS Peoples' Friendship University of Russia Russian Foundation of Basic Research

## 14<sup>th</sup> Russian Gravitational Conference – International Conference on Gravitation, Cosmology and Astrophysics

June 27 – July 2, 2011, UlSPU, Ulyanovsk, Russia



### 4-th Ulyanovsk International School-Seminar "Problems of Theoretical and Observational Cosmology"

July 1 – July 7, 2011, UlSPU, Ulyanovsk, Russia

#### 3-d information letter

#### Dear colleagues,

The Organizing Committee informs that the 14-th Russian Gravitational Conference - International Conference on Gravitation, Cosmology and Astrophysics "RUSGRAV-14" is to be held from June 27 till July 2, 2011. In addition, the 4-th Ulyanovsk International School-Seminar "Problems of theoretical and observational cosmology UISS-2011" is to be held on July 1 - July 7, 2011 at Ulyanovsk State Pedagogical University in Ulyanovsk under the support of Russian Foundation of Basic Research. On-line registration of participants is continuing, and registration for the School-Seminar is started at the conference website <a href="http://rusgrav14.ulspu.ru">http://rusgrav14.ulspu.ru</a>. Abstracts (no more than 2 abstracts from each participant, in which he/she is a speaker) should be sent by e-mail to the scientific secretary S.V. Bolokhov (<a href="https://bolor.rgs@rambler.ru">bolor.rgs@rambler.ru</a>) with a copy for the conference (<a href="mailto:rusgrav14ul@gmail.com">rusgrav14ul@gmail.com</a>) indicating the selected section:

#### A. Classical Gravity.

Chairs: Yu.S. Vladimirov (yusvlad@rambler.ru), S.V. Chervon (chervon.sergey@gmail.com)

#### **B.** Quantum Gravity, String Theory, Supersymmetry.

Chairs: D.V. Galtsov (galtsov@physics.msu.ru), Buchbinder J. L. (joseph@tspu.edu.ru)

#### C. Multidimensional Gravity and Fundamental Constants.

Chairs: V.N. Melnikov (melnikov@phys.msu.ru), V.D. Ivashchuk (iyashchuk@mail.ru)

#### **D.** Black Holes and Wormholes.

Chairs: K.A. Bronnikov (kb20@yandex.ru), S.V. Sushkov (sergey\_sushkov@mail.ru)

#### E. Cosmology.

Chairs: A.A. Starobinsky (alstar@landau.ac.ru), V.N. Lukash (Vladimir@lukash.asc.rssi.ru)

F. Relativistic Astrophysics.

Chair: G.S. Bisnovaty-Kogan (gkogan@iki.rssi.ru)

**G.** Gravitational Experiments.

Chair: V.N. Rudenko (rvn@sai.msu.ru)

**Deadline** for the registration and for an abstract submission to the Conference and the School-Seminar:

April 25, 2011.

Preliminary conference program can be found here.

# 4-th Ulyanovsk International School-Seminar "Problems of theoretical and observational cosmology UISS-2011" $July\ 1-July\ 7,\ 2011$

#### **Organizing Committee:**

Chairman: V.N. Melnikov (RGS, Centre for Gravitation and Fundamental

Metrology, VNIIMS and PFUR, Moscow)

Vice-chairman: A.A. Starobinsky (Landau ITP, RAS, Moscow)

Vice-chairman: S.V. Chervon (UlSPU, Ulyanovsk)

#### **International Organizing Committee:**

Balakin A.B. Russia (KFU, Kazan)

Beesham A. South Africa (Zulu University, Zululand)

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Galtsov D.V.
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Grats Yu.V.
Efremov A.P.
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Zhuravlev V.M.
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Russia (MSU, Moscow)
Russia (PFUR, Moscow)
Ukraine (ONU, Одесса)
Russia (UISU, Ulyanovsk)
Russia (KFU, Kazan)

Lukash V.N. Russia (ASC, Lebedev PI, Moscow)

Maartens R. UK (Inst.Grav.& Cosmol., Portsmouth Univ.)

Mueller V. Germany (AIP, Potsdam)
Narlikhar J.V. India (IUCAA, Pune)

Obukhov Yu.A. Russia and UK (MSU, Moscow)
Sato K. Japan (IPMU, Tokyo Univ., Tokyo)
Sazhin M.V. Russia (Sternberg Astron. Inst., Moscow)

Triay R. France (CPT, CNRS, Marseille)

#### **Local Organizing Committee**

Chervon S.V. Chairman
Shishkarev V.V. Vice-chairman
Shabanov E.V. Secretary,

Panina O.G.
Pozdyshev A.V.
Shchigolev V.K.

#### **Sections and the main topics of the School:**

#### 1. Classical Theory of Gravitation.

Section chairmen: Vladimirov Yu.S. (yusvlad@rambler.ru),

Balakin A.B.(Alexandr, Balakin@ksu.ru)

#### 2. Multidimensional Gravity and Fundamental Constants.

Section chairmen: Melnikov V.N. (melnikov@phys.msu.ru),

Ivashchuk V.D. (ivashchuk@mail.ru)

#### **3.** Cosmology.

Section chairmen: Starobinsky A.A. (alstar@landau.ac.ru),

Chervon S.V. (chervon.sergey@gmail.com)

#### 4. Black Holes and Wormholes.

Section chairmen: Bronnikov K.A. (kb20@yandex.ru),

Sushkov S.V. (sergey\_sushkov@mail.ru)

#### **Lecture courses:**

Bronnikov K.A. Research Methods of Black Holes.

Sushkov S.V. Wormholes with Scalar Fields.

Rubin S.G. Physical Aspects of Inflationary Cosmology.

Barvinsky A.O. Gravitational and Cosmological Effects in the Brane World.

Yefremov A.P. Quaternion Theory of Gravitation and its Astrophysical Consequences.

Yurov A.V. Mathematical Methods in Cosmology.

Rudenko V.N. Gravitational-Wave Experiment: Problems and Prospects.

Sahni V. Dark Energy Problem in Cosmology.

Working languages are Russian and English.

#### Abstracts

The abstracts (up to one page, not more than 2 from each participant, in which he/she is a speaker) are to be prepared in LaTeX2e. The document class is **article**; the page parameter is A4; the font size is 12pt; the text margins are: left = 3 cm, right = 1.5 cm, top = bottom = 2 cm.; figures may be presented as separate \*.eps files. Please do not use your own macros while creating the document.

#### Conference Proceedings

Following the conference, on the basis of expert evaluation of materials submitted for publication, articles will be published in the international scientific journal of the Russian Gravitational Society "Gravitation and Cosmology", distributed worldwide by Springer Publishing.

#### Organization fee

For foreign participants – 200 USD. (For Russian and CIS participants see info in Russian.) Payment of registration fee is available at registration on arrival to the conference.

(The registration fee for participation in the conference and/or school-seminar is the same.)

#### Transport:

Ulyanovsk can be reached from Moscow by train or by Air-line.

For more than a year, the company "Avianova" provides flights between Moscow and Ulyanovsk at a good tickets price (cheaper than the train tickets when purchasing tickets in advance). Information regarding flights and bookings can be found at the company "Avianova" website: http://www.avianova.ru/index.wbp

#### Accommodation

Accommodation is possible in hotels of the city.

Registration fee for foreigners in the hotels is 700 Rub/ 25 USD\*.

#### 1. Venetz Hotel

The Venetz is a three star hotel conveniently located in the central part of Ulyanovsk. The hotel is located within a few minutes' walk of the major shopping, business, entertainment centers and of Ulyanovsk's most picturesque landmarks. The hotel offers suites, apartments, luxury, studio, standard rooms. There are two conference-halls, a business center, a meeting room, a restaurant, bars, cafes, a spacious parking lot.

Address: Sovetskaya 19/9, Ulyanovsk 432063, Russia

#### Rooms

Apartment (Single, 2 rooms).

Price: from 10,100 RUB to 20,630 RUB
Luxury suite A (Single, 2 rooms).

Price: from 7,700 RUB to 10,260 RUB
Price: from 6,110 RUB to 8,200 RUB
Price: from 6,680 RUB to 8,930 RUB
Studio (Single, Twin)

Price: from 6,110 RUB to 7,230 RUB
Price: from 6,110 RUB to 7,230 RUB
Price: from 4,420 RUB to 5,840 RUB

Superior room (Double, 1 bedroom) Price: 4,750 RUB

Standard room, 1<sup>st</sup> category (Single, 1 bedroom), floors 11, 12, 12.

Standard room, 1<sup>st</sup> category (Single, 1 bedroom), floors 8, 9, 18.

Standard room, 1<sup>st</sup> category (Single, 1 bedroom), floors 8-13, 16.

Standard room, 1<sup>st</sup> category (Single, 1 bedroom).

Standard suite, 1<sup>st</sup> category (Single, 1 bedroom, partial renovation).

Standard room, 1<sup>st</sup> category (Single, 1 bedroom, partial renovation).

Price: 2,600 RUB

Standard room, 1<sup>st</sup> category (Single, 1 bedroom, no renovation).

Price: 2,100 RUB

The prices listed are for 1 room/day.

#### 2. Hotel Barcelona

The Barcelona Hotel is situated in the historical district of Ulyanovsk, within 20 minutes' drive from the airport, 10 minutes' drive from the railway station. Many of the city's landmarks are within walking distance, including the theatres, the museums, the central square, shopping, business and entertainment centers.

The hotel offers accommodation in 23 rooms of different categories. Every room features a TV-set, a telephone, air-conditioning, a safe deposit box, a minibar, Internet access.

Guests are welcome at the hotel restaurant decorated in classical Mediterranean style. The restaurant serves dishes of various cuisines.

There is a well-equipped conference hall in the hotel with a capacity of up to 45 people.

The hotel offers its guests a wide range of services and facilities, including a cinema, a sauna, a swimming pool.

Address: 45 Bebel Street, Ulyanovsk, 432063, Russia

#### Rooms:

Standard room.

Standard Double.

Price: 5,260 RUB – 5,550 RUB

Price: 5,420 RUB – 5,950 RUB

Price: 5,420 RUB – 7,140 RUB

Price: 6,820 RUB – 7,140 RUB

Price: 8,490 RUB – 8,840 RUB

Prices are given for one room/day.

<sup>\*</sup>Prices are given in Russian currency Rubles, because the rate USD/RUB is subject to change.

#### 3. Imperial Club Deluxe

The five-star hotel *Imperial Club Deluxe* is located in a green park area (*Aleksanrovsky Park*), on the shore of an artificial lake, surrounded by picturesque park lanes. The park occupies an area of over 35 acres. The territory of the park is secured premises. *Aleksandrovsky Park* offers its guests all they might need for both great recreation and effective work. In summer months, the guests may enjoy the water park, fountains, comfortable pergolas, visit the beach bar, cafes and a Caucasian cuisine center. In winter, the lake surface turns into a skating rink.

*Imperial Club Deluxe* is a park hotel, offering all the facilities for luxurious and refined recreation as well as facilities for holding business meetings, presentations, exhibitions, workshops and seminars. The hotel's classic interior combines antique décor with modern functional luxury. All rooms are equipped with panoramic windows, which look onto *Aleksandrovsky Park*. The hotel offers its guests a Presidential Suite, Grand Suites, Deluxe rooms and Studios.

Imperial Club Deluxe offers fine restaurant options, cafes and bars. "Romanovsky" is a deluxe finedining restaurant, "Schtolz" is a business bar, "Balcony" is an intriguing and romantic caffee. There is also a lobby bar.

Address: Alexandrovskaya Street, 60 Ulyanovsk, Russia

#### Rooms:

Presidential Suite – 25,300 RUB Grand Suite – 22,000 RUB Deluxe Red – 19,800 RUB Deluxe Blue – 19.800 RUB Deluxe White -18,150 RUB Deluxe Green -8,800 RUB Studio -7,700 RUB Studio -6,600 RUB Prices are given for one room/day.

#### **Excursions**

Tours of the city of Ulyanovsk, Ulyanovsk region: Undory, Yazykovo, Prislonikha; Visits to nearest towns: Kazan, Samara, Bolgary, Cheboksary. Short pleasure boat trips on the Volga River.

#### **Excursions**

Excursions will be suggested as tours of the city of Ulyanovsk, Ulyanovsk region: Undory, Yazykovo, Prislonikha; Visits to nearest towns: Kazan, Samara, Bolgary, Cheboksary. Short pleasure tours on Volga River.

#### **International Organizing Committee of the Conference:**

V.N. Melnikov (Chairman, RGS, Centre for Gravitation and Fundamental Metrology, VNIIMS and PFUR, Moscow), D.V. Galtsov (Vice-chairman, Moscow State Univ.), A.A. Starobinsky (Vice-chairman, Landau ITP, Moscow), Yu.S. Vladimirov (Vice-chairman, Moscow State Univ.), S.V. Chervon (Vice-chairman, Ulyanovsk State Pedagogical Univ.), S. V. Bolokhov (Scientific secretary, RGS, PFUR, Moscow).

J.-M. Alimi (LUTH, Obs. Paris-Meudon, France), A.V. Aminova (Kazan' State Univ.), V.G. Bagrov (Tomsk State Univ.), V.A. Belinsky (ICRA, Italy), V.A. Berezin (Inst. Nucl. Research., Moscow), G.S. Bisnovaty-Kogan (Inst. Space Research, Moscow), K.A. Bronnikov (CGFM, Moscow), I.L. Buchbinder (Tomsk State Pedagogical Univ.), V.P. Frolov (UA, Canada), A.A. Grib (Gertsen State Pedagogical Univ. and Friedmann Lab., St-Petersburg), A.P. Yefremov (Peoples' Friendship Univ. of Russia, Moscow), Yu.G. Ignat'ev (KSPU, Kazan'), M. Kenmoku (NWU, Nara,

Japan), M.Yu. Khlopov (MIPI, Moscow), V.N. Lukash (Astro Space Centre, Lebedev PI, Moscow), Luo Jun (HUST, Wuhan, China), Roy Maartens (Inst.Grav.& Cosmol., Portsmouth Univ., Britain), K.-I. Maeda (Waseda Univ, Tokyo, Japan), S.D. Maharaj (KwaZulu-Natal Univ., Durban, SA), V.S. Manko (CINVESTAV, Mexico City, Mexico), A. Minkevich (Minsk, BSU, Belarus'), V.M. Mostepanenko (Leipzig Univ., Germany), V. Mueller (AIP, Potsdam, Germany), J.V. Narlikar (IUCAA, Pune, India), J. Nester (NSU, Taiwan), H. Nicolai (AEI, Golm, Germany), K. Nordtvedt (USA), M. Novello (CBPF, Rio de Janeiro, Brazil), I.D. Novikov (Astro Space Centre, Lebedev PI, Moscow), C. Romero (UFPB, Joao Pessoa, Brazil), V.A. Rubakov (Inst. Nucl. Research, Moscow), V.N. Rudenko (Sternberg Astron. Inst., Moscow), R. Ruffini (ICRA, Italy), K. Sato (IPMU, Tokyo Univ., Japan), M.V. Sazhin (Sternberg Astron. Inst., Moscow), Sung-won Kim (EWU, Seoul, Korea), R. Triay (CPT, CNRS, Marseille, France), A.I. Zhuk (Odessa Nat. Univ., Ukraine).

#### **Local Organizing Committee of the Conference:**

Yu.A. Grushevsky (Chairman, Rector UlSPU), N.A. Il'ina (Vice-chairman, Vice-rector, UlSPU), V.V. Shishkarev (Vice-chairman, UlSPU), S.V. Chervon (Vice-chairman, UlSPU), E.V. Shabanov (Secretary, UlSPU), K.K. Altunin (UlSPU), V.G. Ariskin (UlSPU), A.S. Kubasov (UlSU), O.G. Panina (SGAU, Samara), A.V. Pozdyshev (UlSPU), V.M. Zhuravlev (UlSU), Yu.A. Svistunova (UlSPU), V.K. Shchigolev (UlSU).

Web-sites of RUSGRAV-14: <a href="http://rusgrav14.ulspu.ru">http://rusgrav14.ulspu.ru</a>, <a href="ht

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