



KAZAN FEDERAL UNIVERSITY

**Russian Gravitational Society
5-100 Russian Academic Excellence Project**

**3rd INTERNATIONAL WINTER SCHOOL-SEMINAR
ON GRAVITY, COSMOLOGY, AND ASTROPHYSICS
«PETROV SCHOOL»**

Kazan, 27 November – 2 December 2017

1st INFORMATION LETTER

Dear Colleague!

We are happy to inform you that the 3rd International Winter School-Seminar on gravity, cosmology, and astrophysics «Petrov School» will take place from November, 27 to December, 2 2017 in the Institute of Physics of Kazan Federal University.

The objective of the Winter Petrov School is to preserve and develop the high potential of the Russian scientific school in theory of gravity, astrophysics, cosmology and related areas of physics and mathematics.

Programme of the School will include lectures by the leading scientists. Young scientists participating the School will be able to present their research during the Seminar sessions.

Working languages: Russian, English

School website: <http://kpfu.ru/petrov-school-2017>

School e-mail address: PetrovSchool@mail.ru

Registration: An applicant should fill a registration form on the School website

**LIST OF SCHOOL LECTURERS
(PRELIMINARY)**

- A.A. Starobinsky (Landau ITP, Moscow, Russia) *New results on inflation and its origin from curvature singularity*
- I.F. Bikmaev (KFU, Kazan, Russia) *Scientific tasks of the Spectrum-Roentgen-Gamma project*
- J.C. Fabris (Universidade Federal do Espírito Santo, Vitoria, Brasil) *Quantum Cosmology in Scalar-Tensor Theories*
- H. Velten (Universidade Federal do Espírito Santo, Vitoria, Brasil) *Anomalous gravitational wave speed: Constraints on modified gravity from binary pulsars*
- V.M. Mostepanenko (Pulkovo Central Astronomical Observatory, St. Petersburg, Russia) *The Casimir effect in cosmology and on a laboratory table*
- G.L. Klimchitskaya (Pulkovo Central Astronomical Observatory, St. Petersburg, Russia) *Constraints on an axion and on non-Newtonian gravity from the Casimir effect*
- K.A. Bronnikov (RUDN University, Moscow, Russia) *Wormholes and stability problem*
- S.V. Chervon (Ulyanovsk State Pedagogical University, Russia) *Scalar field cosmologies*
- S. Capozziello (Napoli University, Italia) *Extended Gravity and possible applications*
- F. Lobo (Universidade de Lisboa, Lisboa, Portugal) *1. Generalized curvature-matter couplings in modified gravity; 2. Hybrid metric-Palatini gravity*

- M.S. Volkov (Tour University, France) *Weyl metrics and wormholes*
- E. Elizalde (ICREA, Barcelona, Spain) *On a renormalization group improved accelerating cosmological scenario*
- S.D. Odintsov (ICREA, Barcelona, Spain) *Accelerating cosmology in modified gravity*
- M. Sami (Centre for Theoretical Physics, New Delhi, India) *Quintessential inflation*
- Edvard Musaev (Max-Planck-Institute for Gravitational Physics, Potsdam, Germany) *Exotic branes in string and M-theory*
- Ernazar Abdikamalov (Nazarbayev University, Astana, Kazakhstan) *The Explosions of Massive Stars*
- A.V. Toporensky (Moscow University, Russia) *Compactification scenario in multi-dimensional Gauss-Bonnet cosmology*

INTERNATIONAL PROGRAMME COMMITTEE

A.A. Starobinsky, academician of RAS, *chairman*

(Landau ITP, Moscow)

Prof. S.V. Sushkov, *co-chairman*

(head of the department of General Relativity and Gravity, KFU, Kazan)

M. Abishev (KNU, Almaty, Kazakhstan), A.V. Aminova (KFU, Kazan), V.B. Bagrov (TSU, Tomsk), A.B. Balakin (KFU, Kazan), A.M. Baranov (KSPU, Krasnoyarsk), V.A. Berezin (INR RAS, Moscow), I.F. Bikmaev (KFU, Kazan), G.S. Bisnovaty-Kogan (SRI RAS and MEPhI, Moscow), D.R. Brill (University of Maryland, USA), K.A. Bronnikov (CGFM, Moscow), I.L. Buchbinder (TSPU, Tomsk), S.V. Chervon (USPU, Ulyanovsk), J.C. Fabris (Universidade Federal do Espírito Santo, Vitoria, Brazil), V.P. Frolov (Edmonton University, Canada), D.V. Gal'tsov (MSU, Moscow), A.A. Grib (Friedmann Lab., St.-Petersburg), Yu.G. Ignatiev (KFU, Kazan), R. Kerner (University of Paris, France), Sung-Won Kim (University of Maryland, USA), P. Kuusk (University of Tartu, Estonia), V.N. Lukash (Astro Space Centre, Lebedev PI, Москва), A.V. Minkevich (Minsk University, Belarus), A.Yu. Morozov (ITEP, Moscow), V.M. Mostepanenko (Pulkovo Observatory, St. Petersburg), Wei-Tou Ni (NTHU, Taiwan), Shin'ichi Nojiri (Nagoya University, Japan), S.D. Odintsov (ICREA, Barcelona, Spain), V.F. Panov (Perm University, Perm), N.A. Sakhbullin (KFU, Kazan), M.V. Sazhin (Sternberg Astron. Inst., Moscow), D. Singleton (California State University, Fresno, USA), Yu.S. Vladimirov (MSU, Moscow), A.P. Yefremov (PFUR, Moscow), A.V. Yurov (BFU, Kaliningrad), O.B. Zaslavsky (Kharkov Nat. University, Ukraine), A.I. Zhuk (Odessa Nat. University, Ukraine)

LOCAL ORGANIZING COMMITTEE

Chairman: Prof. S.V. Sushkov (sergey_sushkov@mail.ru, sergey.sushkov@kpfu.ru)

Scientific secretary: V.A. Popov (PetrovSchool@mail.ru)

Members of the committee: A.V. Aminova, A.B. Balakin, I.F. Bikmaev, A.Yu. Kuznetsova, A.E. Zayats, G.A. Seryakin, T.Yu. Alpin, R.A. Abzalov

VISA

Foreign participants must have a valid passport and may need a visa for entry into the Russian Federation. An official invitation letter which is needed when applying for the visa will be prepared by the organizing committee for registered participants. To prepare an invitation we need the following information:

- copy of valid passport (as a pdf- or jpg-file)
- official address of your place of work and your position
- phone number
- name of a city where a Russian Embassy or Consulate is located and where you will apply and then obtain a visa

– dates of visit

As the process for obtaining a visa takes time, please request the invitation letter as soon as possible!