

Folomeev Vladimir

Position: Senior Staff Scientist
Institute of Physics of the National
Academy of Sciences of the Kyrgyz Republic

Period covered: 2000-2008



I Scientific Work

Investigations in the field of cosmology, gravitation and relativistic astrophysics. The main works are devoted to consideration of models of the early and present Universe: quantum cosmology, inflation in the early and present Universe, multidimensional models of the Universe, compact astrophysical objects, regular solutions with scalar fields and so on.

II Conferences and educational activities

Conferences and Other External Scientific Work

- Summer school in Cosmology, International Centre for Theoretical Physics, Trieste, Italy, July 2008.
- The seminar in the California State University, Fresno, USA, April 2008.
- The seminar in the International Center for Relativistic Astrophysics, Pescara, Italy, March 2008.
- Eleventh Marcel Grossmann Meeting on General Relativity, Berlin, Germany, July 2006.
- The International Conference on gravitation, cosmology and astrophysics, Moscow, Russia, March 2006.
- The seminar in the International Center for Relativistic Astrophysics, Pescara, Italy, Sept. 2005.
- The International Conference devoted to the 70th anniversary of academician R. Sagdeev, Bishkek, Kyrgyz Republic, Feb. 2003.
- The seminar in the Department of Theoretical Physics in the Freie University, Berlin, Germany, Sept. 2001.
- The International Conference devoted to the 80th anniversary of academician A. Sakharov, Bishkek, Kyrgyz Republic, May 2001.
- The All-Moscow Astrophysics Seminar, Sternberg Astronomical Institute, Moscow, Russia, Feb. 2000.
- The All-Moscow Astrophysics Seminar, Sternberg Astronomical Institute, Moscow, Russia, Dec. 1999.
- The International Conference devoted to the 120th anniversary of A. Einstein, Bishkek, Kyrgyz Republic, Sept. 1999.
- The 10th Russian Gravitational Conference, Vladimir, Russia, June 1999.

III 2007-2008 List of Publications

Cosmic string with two interacting scalar fields, V. Dzhunushaliev, V. Folomeev, K. Myrzakulov, R. Myrzakulov, *Mod. Phys. Lett.*, A22, 407 Bianchi type I model with two interacting scalar fields, V. Folomeev, *Int. J. Mod. Phys.*, D16, 1845

Thick branes from scalar fields, V. Dzhunushaliev, V. Folomeev, D. Singleton, S. Aguilar-Rudametkin, *Phys. Rev.*, D77:044006, 8 p.

Thick brane in 7D and 8D spacetimes, V. Dzhunushaliev, V. Folomeev, K. Myrzakulov, R. Myrzakulov, *General Relat. and Grav.*, DOI 10.1007/s10714-008-0659-8, 8 p.

Viscous dark fluid, V. Folomeev, V. Gurovich, *Phys. Lett.*, B661, 75

4D static solutions with interacting phantom fields, V. Dzhunushaliev, V. Folomeev, e-Print: 0711.2840 [gr-qc], Accepted for publication in *Int. J. Mod. Phys. D*.

Bouncing off and inflation of the Universe with phantom fields, V.D. Dzhunushaliev, V.N. Folomeev, K. Myrzakulov, R. Myrzakulov, A. Temirova, *Herald of the Kyrgyz-Russian Slavic University*, 7, No. 8, 3

Phantom thick brane in 5D bulk, V. Dzhunushaliev, V. Folomeev, S. Myrzakul, R. Myrzakulov, *Mod. Phys. Lett.*, A23, No. 33, 2811

Non-singular solutions to Einstein-Klein-Gordon equations with a phantom scalar field, V. Dzhunushaliev, V. Folomeev, R. Myrzakulov, D. Singleton, *Jour. High Energy Phys.*, 0807:094, 14 p.

Star with phantom scalar field, V. Folomeev, *Proceedings of the Institutes of Higher Education*, No. 3-4, 28

Spherical relativistic detonation of scalar stars, V. Folomeev, *Proceedings of the Institutes of Higher Education*, No. 3-4, 186

Dark energy: conformal anomaly and bulk viscosity, V. Folomeev, *Herald of the Kyrgyz-Russian Slavic University*, 8, No. 10, 12

Gamma-ray bursts as relativistic detonation of scalar fields, V. Folomeev, *Proceedings of the National Academy of Science*, No. 3, 23

Vladimir Folomeev was born in Bishkek (Kyrgyzstan) in 1974. He received his PhD diploma of physics from the All-Russian Research Institute of Metrological Service (Moscow, Russia) in 2000. After that he started to work in the Institute of Physics of the National Academy of Science of the Kyrgyz Republic, and he works there till now.

The field of his scientific interests lies in the range from investigations of models of low-temperature plasma in terrestrial conditions and in the Universe to researches in the field of cosmology, gravitation and relativistic astrophysics. His main works are devoted to consideration of models of the early and present Universe: quantum cosmology, inflation in the early and present Universe, multidimensional models of the Universe, compact astrophysical objects, regular solutions with scalar fields and so on. He has published more than 30 scientific papers and 1 book.

He got two research fellowships from the German Academic Exchange Service (DAAD) and a grant from the California State University (Fresno, USA). He also was a research worker in two projects of the International Scientific & Technical Center (Moscow, Russia). He was a member of organizing committees of several international conferences which have been held in Kyrgyzstan.