

PROGRAM OF THE CONFERENCE

Wednesday, September 21

13:00–13:30 Registration

13:30–13:40 Opening

Chair: Yurii V. Dumin

13:40–14:30 **Igor Karachentsev**, Cosmography of the local universe

14:30–15:20 **André Maeder**, Scale invariance: Its cosmological and local effects

15:20–15:50 Coffee Break

Chair: Lawrence Somer

15:50–16:40 **Yurii V. Dumin**, Local Hubble expansion: Current state of the problem

16:40–17:30 **Georg Feulner**, The faint young Sun paradox

17:30–18:00 **Michal Křížek**, Anthropic principle and the local Hubble expansion

Thursday, September 22

Chair: André Maeder

9:00–9:50 **Pavel Kroupa**, The observed spatial distribution of matter on scales ranging from 100 kpc to 1Gpc is inconsistent with the standard dark-matter-based cosmological models

9:50–10:40 **Marek Nowakowski**, A local portrait of the cosmological constant

10:40–11:10 Coffee Break

Chair: Igor Karachentsev

11:10–11:40 **Lidia Makarova**, Dwarf galaxies in the local volume of the Universe

11:40–14:00 Lunch Break

Chair: Pavel Kroupa

14:00–14:30 **Itzhak Goldman**, Do recent observations of giant molecular clouds suggest modification of gravity?

14:30–15:00 **Ilia V. Sokolov**, Clustering of galaxies around the GBR 021004 sight-line at $z \sim 0.5$

15:00–15:30 Coffee Break

Chair: Yurii V. Dumin

15:30–16:20 **Igor N. Taganov**, Theoretical estimation of the Hubble constant

16:20–16:40 **Yurij V. Baryshev**, Two fundamental cosmological laws of the local universe (presented by Y. V. Dumin)

16:40–17:10 **Michal Křížek**, Mercury's perihelion shift in terms of numerical mathematics

Friday, September 23

Chair: Itzhak Goldman

9:00–9:30 **Attila Mészáros**, Anisotropies in the sky distributions of the gamma-ray bursts and the cosmological principle

9:30–10:00 **Bivudutta Mishra**, Anisotropic Bianchi type VI_h cosmological models in modified gravity

10:00–10:30 **Alessandro D. A. M. Spallicci**, Non-Maxwellian electromagnetism implications on astrophysical and cosmological scales

10:30–11:00 Coffee Break

Chair: Attila Mészáros

11:00–11:50 **Alexander B. Balakin**, Non-minimal coupling and a new small scale in the cosmological landscape around a magnetic monopole

11:50–14:00 Lunch Break

Chair: Marek Nowakowski

14:00–14:30 **Michal Křížek, Attila Mészáros**, On the Friedmann equation for the three-dimensional hypersphere

14:30–15:20 **Michal Bílek**, Modified Newtonian Dynamics and shell galaxies

15:20–15:50 **Konstantin A. Tomilin**, Gravitational constant: history and modern status

15:50–17:00 **Discussion**

Saturday, September 24

9:00–12:00 Excursion to the astronomical and cosmological sights of Prague guided by **Michal Krížek**. We will meet at 9:00 in front of the main gate of the Institute of Mathematics in Žitná 25.