International Conference "Real and Complex Dynamical Systems", dedicated to Prof. Yulij Ilyashenko's 80-th Birthday

Tsaghkadzor, Armenia, November 20-25, 2023

All the talks and all the meals (except for lunch and dinner at Wednesday, November 22) will take place at **Ripa Hotel**, Tsaghkadzor

Program

Monday November 20

9:00-10:00 Breakfaft

8:30 - 10:00 Registration

10:00 - 10:15 Opening

10:15 - 10:55 Dmitry Treschev

10:55 - 11:25 Coffee

11:25 - 12:05 Raphael Krikorian

12:15 - 12:45 Sanjeeva Balasuriya

13:00 - 14:30 Lunch

15:30 - 16:10 Frank Loray (online)

16:20 - 16:50 Sergei Voronin

16:50 - 17:20 Coffee

17:20 - 18:00 Laurent Stolovitch

18:10 - 18:40 Irina Astashova

19:00 - 21:00 Dinner

Tuesday November 21

9:00 - 10:00 Breakfast

10:00 - 10:40 Konstantin Khanin

10:40 - 11:10 Coffee

11:10 - 11:30 Zhaofeng Lin

11:40 - 12:00 Sergei Gorbunov

12:10 - 12:40 Alexey Klimenko

13:00 - 14:30 Lunch

15:00 - 15:40 Alexandra Skripchenko

15:50 - 16:20 Armen Bagdasaryan

16:20 - 18:20 Coffee and poster session.

Posters: Timur Bakiev, Ekaterina Chilina, Alexey Glutsyuk, Elena Nozdrinova, Polina Shaikhullina, Danil Shubin, Ilya Tolstukhin, Ekaterina Tsaplina.

18:45 - 20:15 Dinner

20:30 - 21:10 Alexander Bufetov

Babylonian lunar theory (informal evening lecture)

See its abstract at the end of this schedule.

Wednesday November 22

8:50 - 9:40 Breakfast

9:40 - 10:20 Marco Mazzucchelli

10:20 - 10:50 Coffee

10:50 - 11:30 Sergei Tabachnikov

Excursion (or hike). During it, lunch and dinner will be organized.

Thursday November 23

9:00-9:50 Breakfast

9:50 - 10:30 Sergei Pilyugin

10:40 - 11:10 Andrey Dukov

11:10 - 11:40 Coffee

11:40 - 12:10 Dmitry Filimonov

12:20 - 12:50 Yury Kudryashov

13:00 - 14:30 Lunch

15:30 - 16:10 Bertrand Deroin (online)

- 16:10 16:40 Coffee
- 16:40 17:20 Yulij Ilyashenko
- 17:45 19:00 Duduk concert
- 19:00 Banquet

Friday November 24

- 9:00 10:00 Breakfast
- 10:00 10:40 Mikhail Lyubich
- 10:50 11:20 Natalia Goncharuk
- 11:20 11:50 Coffee
- 11:50 12:30 Artur Ishkhanyan
- 13:00 14:30 Lunch
- 15:00 15:40 Anton Gorodetski
- 15:50 16:30 Victor Kleptsyn
- 16:30 17:00 Coffee
- 17:00 17:40 Melvin Yeung (online)
- 17:50 18:30 Askold Khovanskii (online)
- 18:45 20:15 Dinner

Saturday November 25

- Breakfast 8:50 9:40
- 9:40 10:20 Olga Pochinka
- 10:30 11:00 Elena Gurevich
- 11:00 11:30 Coffee
- 11:30 12:00 Ivan Shilin
- 12:10 12:50 Vladlen Timorin
- 12:50 Closing
- 13:00 14:30 Lunch
- 18:45 20:15 Dinner

Babylonian lunar theory

Alexander Bufetov

Tuesday 20:30-21:10

Abstract. The Babylonian tablets with the ephemerides of the moon and the planets reveal an underlying precise mathematical theory: the Babylonian astronomers almost used splines. The simpler System A is the tersitu of Naburimannu, indicate the tablets, while the more intricate System B is the tersitu of Kidinnu. While most of our evidence comes from the Seleucid era, the systems themselves are believed to have been developed under the Achaemenids. In this short communication, we will briefly review the Systems A and B. Following the discovery of numerous astronomical tablets by the Jesuit priest Johann Nepomuk Strassmaier, the reconstruction of the Babylonian lunar theory was started by Franz Xaver Kugler in 1911 and developed by Otto Neugebauer in the 1930s-1950s. The breakthrough of Kugler and Neugebauer was all the more dramatic in that it was completely unexpected: the Classical sources, while frequently mentioning the "Chaldaean astronomers", give not the slightest indication concerning the mathematical method of the Babylonians.