

Bahçeşehir University, Istanbul, Turkey  
Analysis & PDE Center, Ghent University, Ghent, Belgium  
Institute Mathematics & Math. Modeling, Almaty, Kazakhstan

## “Analysis and Applied Mathematics”

Weekly Online Seminar

### Seminar leaders:

Prof. Allaberan Ashyralyev (BAU, Istanbul),  
Prof. Michael Ruzhansky (UGent, Ghent),  
Prof. Makhmud Sadybekov (IMMM, Almaty)

Date: **Tuesday, March 15, 2022**

Time: 13.00-14.00 (Istanbul) = 11.00-12.00 (Ghent) = 16.00-17.00 (Almaty)

Zoom link: <https://us02web.zoom.us/j/6678270445?pwd=SFNmQUlvT0tRaH-IDAyYrN3l5bzJVQT09>, **Conference ID:** 667 827 0445, **Access code:** 1

### Speaker:

**Prof. Dr. Mamadsho Ilolov**

*National Academy of Sciences of Tajikistan, Dushanbe, Tajikistan*

Title: **Lyapunov function and stability of solutions of stochastic differential equations with fractional-like derivatives**

Abstract: The paper is devoted to the analysis of questions related to the stability of fractional-like stochastic differential equations. Stochastic stability and asymptotically stochastic stability is considered with the use of Lyapunov function. Almost sure exponential stability is established on the Ito formula of the fractional-like derivatives.

### Biography:

Mamadsho Ilolov graduated in 1970 from Voronezh State University with a degree in mathematics / computational mathematics. He defended his candidate's thesis in 1980 and his doctoral dissertation in 1992 at the Institute of Mathematics of the Ukrainian Academy of Sciences. In 1997, Prof. Dr. Mamadsho Ilolov was elected as a corresponding member, and in 2005, as an academician of the Academy of Sciences of the Republic of Tajikistan. From 1970 to 1990, he worked at the Tajik State University. From 1991 to 1992, he served as the head of the department of science and publications of the Ministry of Education. In 1992, Prof. Dr. Mamadsho Ilolov was appointed as the rector of Khorog State University. In the period from 1995 to 2003, he served as the chairman of the Republic of Tajikistan Parliamentary Committee. From 2003 to 2005, he was the Minister of Labor and Social Protection of the Republic of Tajikistan. From 2005 to 2013, he was the President of the Academy of Sciences of the Republic of Tajikistan. From 2014 to 2019, he worked as the director of the Center for Innovative Development of Science and New Technologies of the Academy of Sciences of the Republic of Tajikistan. Currently, he holds the position of the head of the department of this Center. Prof. Dr. Mamadsho Ilolov's scientific activity is mainly related to

the theory of differential equations and its applications. He is the author of two monographs and over 150 articles. He supervised the scientific work of about 40 masters and 6 candidates of science.