

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

“Analysis and Applied Mathematics”

Weekly Online Seminar

Seminar leaders:

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

Date: **Tuesday, March 12, 2024**

Time: 14.00-15.00 (Istanbul) = 12.00-13.00 (Ghent) = 16.00-17.00 (Almaty)

Zoom link: <https://us02web.zoom.us/j/6678270445?pwd=SFNmQUlVTOtRaH-IDaVYrN3I5bzJVQT09>, **Conference ID:** 667 827 0445, **Access code:** 1

Speaker:

Prof. Dr. Aleksandr L. Skubachevskii

Peoples' Friendship University of Russia named after Patris Lumumba (RUDN), Moscow, Russia

Title: **On smoothness of generalized eigenfunctions for differential-difference operators**

Abstract: Unlike ordinary differential equations with constant coefficients, smoothness of generalized solutions to boundary value problems for neutral differential-difference equations on a finite interval $(0, d)$ can be violated and preserved only on some subintervals. However, for generalized eigenfunctions of differential-difference operators problem of smoothness remained open. In this lecture we obtain the necessary and sufficient conditions of smoothness for eigenfunctions of differential-difference operators. The talk will be based on joint work with R. Yu. Vorotnikov.

Biography:

Aleksandr L. Skubachevskii received his PhD degree from Moscow Aviation Institute (MAI) in 1980. In 1987, he obtained the degree of Doctor of Sciences in Mathematics from the Steklov Institute of Mathematics (Moscow, Russia). He held the position of Full Professor and Head of Department of Differential Equations in MAI from 1988 to 2005. Since 2005, he is a Full Professor, Head of the Department and Director of Mathematical Institute at RUDN (Moscow, Russia). Prof. Dr. A. L. Skubachevskii has research interests in the following areas: elliptic and parabolic functional differential equations, nonlocal problems, Feller semigroups, Vlasov-Poisson equations, Kato square problem. Throughout his career, he received a number of prestigious awards, such as the Petrovskii Prize of the Russian Academy of Sciences for Outstanding Results in Mathematics, Honored Worker of Science of the Russian Federation, Laureate of the Russian Award “Professor of Year” etc.