

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, February 13, 2024**

Time: 14.00-15.00 (Istanbul) = 12.00-13.00 (Ghent) = 17.00-18.00 (Almaty)

Zoom link: <https://us02web.zoom.us/j/6678270445?pwd=SFNmQUlVt0tRaH-IDaVYrN3I5bzJVQT09>, **Conference ID:** 667 827 0445, **Access code:** 1

Speaker:

Prof. Dr. Nigar Aslanova

Azerbaijan University of Architecture and Construction, Baku, Azerbaijan

Title: On some spectral questions of fourth order differential operators with operator coefficient

Abstract: We give descriptions of extensions with exit from space for minimal operator associated with boundary value problems for fourth-order differential equations with unbounded operator coefficients. Also, eigenvalue asymptotics is established. We prove one important relationship between characteristic determinants and norming constants, which is applied to the calculation of regularized trace for one self-adjoint extension of minimal operator.

Biography:

Nigar Aslanova obtained a degree in Mechanics and Mathematics from Baku State University in 1992 and PhD degree in Mathematics from Institute of Mathematics and Mechanics of National Academy of Sciences of Azerbaijan in 1996. In 2004, she defended her doctoral thesis and obtained the title of Doctor of Sciences in Mathematics. Since 2014, she is a Professor at the Department of Higher Mathematics at Azerbaijan University of Architecture and Construction. Her topics of research deal mostly with spectral theory of differential operators, functional analysis, boundary value problems, and inverse problems.