





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, January 30, 2024

<u>Time</u>: 12.00-13.00 (Istanbul) = 10.00-11.00 (Ghent) = 15.00-16.00 (Almaty)

Zoom link: https://us02web.zoom.us/j/6678270445?pwd=SFNmQUIvT0tRaH-IDaVYrN3I5bzJVQT09, Conference ID: 667 827 0445, Access code: 1

### Speaker:

## **Dr. Dimitrios Papathanasiou**

Sabanci University, Istanbul, Türkiye

# **Title:** Backward shift operators in Linear Dynamics

<u>Abstract:</u> Weighted backward shifts are among the most important classes of operators. Their dynamic behaviour has been well understood since the work of Salas. The need for creating more sophisticated examples of operators yet preserving some of the nice properties of weighted backward shifts has motivated the researchers to generalise the notion of a backward shift in several different directions. In the present talk, we will introduce weighted shifts on trees, weighted shifts on graphs, as well as an abstraction of those which we call generalized shifts. We will try to indicate the common properties enjoyed by all those shifts and mention some of their differences. The talk will be based on joint works with Karl Grosse-Erdmann, Quentin Menet, Anton Baranov and Andrei Lishanskii.

## **Biography:**

**Dimitrios Papathanasiou** obtained the degree in mathematics and the Master's degree in pure mathematics from the Aristotle University of Thessaloniki. His graduate studies took place in Bowling Green State University (United States). The years following his PhD, Dimitrios worked as a post doctoral fellow in Universite de Mons (Belgium), Universite Blaise Pascal (France) and Saint Petersburg State University (Russia). Recently, he became a faculty member at Sabanci University.