

## UNIVERSITÄT GRAZ UNIVERSITY OF GRAZ



Department of Economics

Host: Univ.-Prof. Dr. Hans Manner

## INVITATION

Joint seminar in Statistics with TU Graz

## Associate Professor Dr. Nazarii Salish

(University Carlos III de Madrid)

On the topic:

## "Approximate Factor Models for Functional Time Series" (with Sven Otto)

We propose an approximate factor model for time-dependent curve data that represents a functional time series as the aggregate of a predictive low-dimensional component and an unpredictive infinite-dimensional component. Suitable identification conditions lead to a two-stage estimation procedure based on functional principal components, and the number of factors is estimated consistently through an information criterion-based approach. The methodology is applied to the problem of modeling and predicting yield curves. Our results indicate that more than three factors are required to characterize the dynamics of the term structure of bond yields.

Date: May 23, 2023

Starting time: 5.15 p.m. Location: HS 111.21

All professors, lecturers, assistants and students are cordially invited to this lecture!