

## Summer School 2026

Topics in Banach Space Theory

# On composition operators in some sequence spaces

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**Day and time** Thursday: 12:35–13:00

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### Abstract

In this talk, I will focus mainly on nonlinear composition operators, that is, superposition (or Nemytskii) operators generated by functions that do not depend on the time variable, acting between certain sequence spaces, in particular in the space  $bv_p(E)$  consisting of  $E$ -valued sequences of  $p$ -bounded variation, where  $(p \geq 1)$  and  $E$  is an arbitrary normed space.

I will present both necessary and sufficient conditions under which composition operators act on these spaces. I will also discuss local boundedness and boundedness of composition operators. Moreover, I will describe various types of continuity of such operators, including pointwise continuity, uniform continuity, and local uniform continuity.