

## **Analysis Seminar**

## Chaotic weighted shifts on directed trees

By

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**Abstract:** The problem of characterizing when a unilateral or a bilateral weighted backward shift is chaotic has been completely solved by Grosse-Erdmann. We will discuss the generalization of this problem for weighted backward shifts on directed trees. Specifically, we will characterize when such operators are chaotic when acting on general Fréchet sequence spaces defined on either a rooted or unrooted directed tree. When the underlying space is of type  $I^p$ ,  $1 \le p < \infty$  or c\_0, the characterizations can be expressed via generalized continued fractions which depend on the weight family and the geometry of the tree.

Date: Monday, March 25, 2024 Time: 15:30-16:30 Place: SA141 - Mathematics Seminar Room