



Friedrich-Alexander-Universität
Research Center for
Mathematics of Data | MoD

FAU MoD Lecture Series



Mathematics of neural stem cells: Linking data and processes

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DKFZ

GERMAN CANCER RESEARCH CENTER



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WHEN

Wednesday **May 7, 2025**
16:00H (Berlin time)

WHERE

On-site / Online

Friedrich-Alexander-Universität
Erlangen-Nürnberg (FAU)
Room **H12**
Felix-Klein building
Cauerstraße 11, 91058
Erlangen. Bavaria, Germany

Live-streaming:

www.fau.tv/fau-mod-livestream-2025

Adult stem cells are described as a discrete population of cells that stand at the top of a hierarchy of progressively differentiating cells. Through their unique ability to self-renew and differentiate, they regulate the number of end-differentiated cells that contribute to tissue physiology. The question of how discrete, continuous, or reversible the transitions through these hierarchies are and the precise parameters that determine the ultimate performance of stem cells in adulthood are the subject of intense research. In my talk I will sketch opportunities for mathematical modelling to improve the mechanistic understanding of stem cell dynamics in adult tissues.