Prof. Dr. rer. nat. Ralf Steuer

Chair "Statistical Physics of Evolution" at the University Leipzig

Role in LiSyM-Cancer

- Project leader in SMART-NAFLD
- Quantitative modeling of cellular metabolism

Expertise

- Computational modeling of microbial metabolism and metabolic networks
- Stoichiometric network reconstruction and constraint-based modeling
- Computational modeling of microbial communities and ecosystems
- Photosynthesis, phototrophic growth, and microbial carbon assimilation
- Metabolomic data analysis and information-theoretic methods

Degrees

- 2001, Diploma in Physics, Humboldt- University of Berlin
- 2005, Dr. rer. nat. in Physics/Nonlinear Dynamics, University Potsdam

Professional Experience

- Since 2024, Professor for Statistical Physics of Evolution, Peter Debye Institute for Soft Matter Physics, University Leipzig
- 2012 - 2024, Group leader “Metabolic Network Analysis”, Institute for Theoretical Biology, Humboldt-University of Berlin

Publications

2025-02-01	Targeting aldolase A in hepatocellular carcinoma leads to imbalanced glycolysis and energy stress due to uncontrolled FBP accumulation *Nature Metabolism*