## Fakultät für Informatik und Mathematik - Universität Passau

## Einladung zum Kolloquium

Dienstag, 18.6.2024, 17:00 – 18:00 Uhr Hörsaal 11, FIM, Innstr. 33 auf Einladung von Prof. Dr. Joscha Prochno zum Vortrag von

Prof. Dr. Simon Foucart
Texas A&M University, U.S.A.
mit dem Vortragstitel

## **Optimal Recovery as a Worst-Case Learning Theory**

ABSTRACT: This talk showcases the speaker's recent results in the field of Optimal Recovery, viewed as a trustworthy Learning Theory focusing on the worst case. At the core of several results presented here is a scenario, resolved in the global and the local settings, where the model set is the intersection of two hyperellipsoids. This has implications in optimal recovery from deterministically inaccurate data and in optimal recovery under a multifidelity-inspired model. In both situations, the theory becomes richer when considering the optimal estimation of linear functionals. This particular case also comes with additional results in the presence of randomly inaccurate data.