

Speaker: Michael SKINNIDER (Princeton University, USA)

Title: **Charting the unknown metabolome with biochemical AI**

Abstract: There is a vast and largely unknown chemical world within our bodies and in the world around us. Mass spectrometry-based metabolomics detects thousands of small molecules in biological samples, but the overwhelming majority remain unidentified. I will discuss a series of AI models that my group has developed to decode the cryptic small molecules that are detected, but not identified, in metabolomic experiments, and thereby open a new lens on the chemical worlds around and within us.