
THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Faculty Seminar

Room 155 ,Ziskind Building
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Data Tools for Accelerated Scientific Discoveries

Abstract:

Like general data scientists, scientists conducting empirical research rely on data and analyze it to extract meaningful insights. Yet, scientists have two qualities that distinguish them from general data scientists: (1) they rely on extensive scientific domain knowledge to make scientific discoveries, and (2) they aim to explain and understand, not simply predict, the real world. These two qualities must be reflected in their data analysis tools to assist them and accelerate the process of making real-world discoveries. In this talk, I will present data tools for accelerated scientific discoveries. In particular, I will present tools that assist scientists in investigating their data using scientific knowledge and helping scientists acquire missing data and domain-specific knowledge required to understand real-world mechanisms and draw trustworthy conclusions.