SIRA Brown Bag Talk

Swiss Informatics Research Association

Title: The World in World Models

Speaker: Paolo Favaro, Universität Bern

Date: Friday November 20, 2026 13:15–14:00 CET

Place: University of Bern, main building, Hochschulstrasse 4, room 028
and
Online – https://uzh.zoom.us/j/64841027306?pwd=T8cVfpel2xRNQeUttvT7iff6Ppl8vb.1

Abstract

A world model is an AI system that learns to predict how a situation might unfold. This ability matters because anticipating what happens next helps us plan, make decisions, and understand the consequences of our actions. But what does a model learn by predicting the future? Does it also learn to solve new problems?

In this talk, I will explore these questions through our recent work on AI systems that learn to generate videos. Using simple puzzles and games, I will show how these systems can be taught to solve new problems with only a few examples. I will discuss what their successes and mistakes reveal about what they have learned, and what this suggests about the potential of learning from visual experience.

Bio

PAOLO FAVARO is a professor of computer science at the University of Bern, Switzerland, where he leads the Computer Vision Group. His research focuses on computer vision, machine learning, and computational photography.

He earned his PhD in electrical engineering from Washington University in St. Louis and held research and academic positions at UCLA, the University of Cambridge, Siemens Corporate Research, and Heriot-Watt University before joining Bern in 2012.