



# PHYSICS COLLOQUIUM: Machine Learning for Physics, Physics for Machine Learning

Date:

2/24/2023

Time:

10:30 AM - 11:50 AM

Location:

GRANITE PASS 135

**Uros Seljak**  
Professor, Physics  
UC Berkeley



**About The Speaker:**

Professor of Physics, Professor of Astronomy, UC Berkeley, Senior Faculty Scientist LBNL

**Abstract:**

Use of machine learning in science has been rapidly growing in recent years, and I will describe some of the methods we developed and their applications to astrophysics and cosmology. Use of physics ideas in machine learning has also been growing in recent years. Our focus has been on optimization and sampling, and I will describe the methods we developed and their applications. Finally, better and faster sampling methods enable us to solve some of the most difficult numerical problems in cosmology, such as reconstruction of the initial conditions for our universe.

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