







**Prof. Željko IVEZIĆ**  
University of Washington  
Department of Astronomy  
PAB 357  
3910 15th. Ave. NE  
Seattle (WA) 98 195  
USA  
e-mail: izevic@astro.washington.edu

**Keynote-4**

-  **ABSTRACT**
-  **PRESENTATION**
-  **PAPER** 

*Željko Ivezic is a professor of astronomy at the University of Washington. He obtained his undergraduate degrees in physics and mechanical engineering from the University of Zagreb, Croatia and his PhD in physics from the University of Kentucky. He is serving as the Rubin Observatory Construction Director and Head of Science for Rubin's Legacy Survey of Space and Time. His scientific interests include detection, analysis and interpretation of electromagnetic radiation from astronomical sources, with emphasis on Big Data analysis and modeling of infrared radiative transfer in stellar envelopes and quasars.*

## ASTRONOMERS AND AI IN THE BIG DATA ERA

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Astronomical sky surveying is experiencing a bonanza as detectors, telescopes and computers become ever more powerful. At the same time, increased data rates, volume and complexity lead to new challenges for data analysis. I will first motivate discussion by introducing Rubin Observatory and Legacy Survey of Space and Time, which will deliver about

100 PB of astronomical imaging data and catalogs including over 20 billion stars, galaxies and other objects, and then I will discuss a few analysis challenges using examples ranging from studies of dark matter and dark energy to search for hazardous near-Earth asteroids.