International Max Planck Research School for Astronomy & Cosmic Physics at the University of Heidelberg (IMPRS-HD)*

The 20th Heidelberg Summer School 2025

September 8-12, Heidelberg

AI for Astronomy

Astronomy today faces unprecedented challenges as observational datasets grow exponentially in size and complexity. Extracting meaningful insights from massive surveys, simulating intricate cosmic processes, and addressing uncertainties in astrophysical models are some of the key difficulties.

By leveraging AI advancements, astronomers can now extract deeper insights from observational data, model complex astrophysical systems with improved precision, and enhance scientific discovery.

The IMPRS Summer School 2025 is designed to provide participants with hands-on experience in modern AI techniques tailored for astrophysical research. Students will gain expertise in state-of-the-art machine learning frameworks, simulation methodologies, and uncertainty quantification approaches.

*) IMPRS-HD is an independent part of the Heidelberg Graduate School for Physics, HGSFP

SCHOOL LECTURERS

Aleksandra Ciprijanovic (Fermilab)
Ioana Ciuca (KIPAC)
Carolina Cuesta-Lazaro (Havard U.)
Matthew Ho (Columbia U.)
François Lanusse (CNRS)

INFORMATION & REGISTRATION

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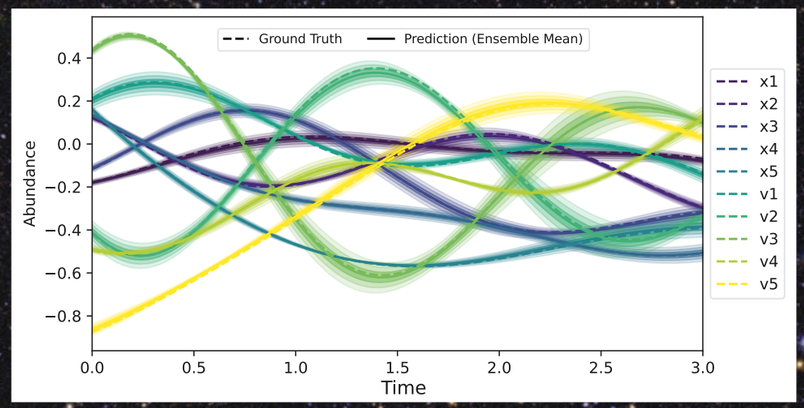
DEADLINE FOR REGISTRATION

June 30, 2025



Credit: Tobias Buck, IWR

Credit: E SO

Credit: Elizabeth Wheatley (STScI)

Credit: Bettymaya Foott/NSF NRAO/AUI