

# Lecture from Associate Prof. Pedram Hassanzadeh - AI and the 2nd revolution in



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Staff

1 min read

AI is transforming weather/climate modeling. For example, AI weather models outperform physics-based models at a fraction of the computing time. However, AI models have challenges with learning the rarest yet most impactful weather extremes and multi-scale chaotic dynamics. This lecture will explore how concepts/tools from math, physics, and AI should be integrated to make progress.

This lecture will kick off the Statistical Mechanics of the Climate System and of Ecosystems workshops, running from 1st - 3rd July:-

<https://vlucarini.github.io/conference.html>



[Pedram Hassanzadeh](#) is an Associate Professor at the University of Chicago's Department of Geophysical Sciences, Committee on Computational and Applied Math, and Data Science Institute. He is the faculty director of the AI for Climate Initiative (AICE) and co-director of the Human-centered Weather Forecasting Initiative. He received his MA (in applied math) and PhD (working on geophysical turbulence) from UC Berkeley in 2013. He was a Ziff

Environmental Fellow at Harvard University before joining Rice University in 2016 and moving to the University of Chicago in 2024. His research is at the intersection of climate change, scientific machine learning, computational and applied math, extreme weather, and turbulence physics. He has received an NSF CAREER Award, ONR Young Investigator Award, and Early Career Fellowship from the National Academies Gulf Research Program.

Monday 30th June. Sir Bob Burgess Building - Lecture Theatre 2.

Lecture is planned to run from 5.30pm - 6.30pm, after which there will be a drinks reception for guests in SBB room 2.03.

Reserve your tickets using this link:-

[www.le.ac.uk/professor-hassanzadeh-lecture](http://www.le.ac.uk/professor-hassanzadeh-lecture)