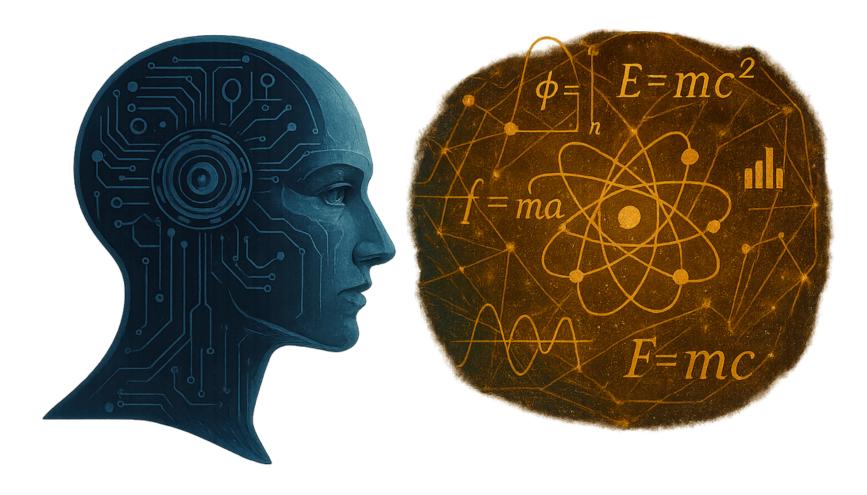
Panel Discussion

Does Physics need AI? Does AI need Physics?

Al for Data Intensive Science & Industry workshop, UCL, 30 June – 2 July 2025



Facilitated by Jason McEwen

Professor Mullard Space Science Laboratory (MSSL), UCL Mission Director, Fundamental AI for Physical Systems Alan Turing Institute



Panel



Ben Wandelt

Professor
Department of Physics & Astronmy
Department of Mathematics & Statistics
John Hopkins University



Iulia Georgescu

Science & Innovation Manager Institute of Physics (IoP)



Andrew Duncan

Professor
Department of Mathematics
Imperial College

Director of Science & Innovation Alan Turing Institute



Sarah Malik

Royal Society Unviersity Research Fellow Department of Physics & Astronmy UCL



Does Physics need AI?

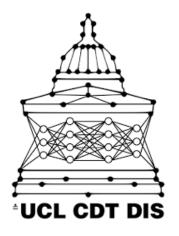


Freeman Dyson

Distinguished physicist

& mathematician

"Science is not a machine. It is a human activity, and the best science emerges from imagination, not from algorithms."



Does Al need Physics?



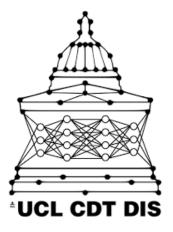
Rich Sutton

Turing Award

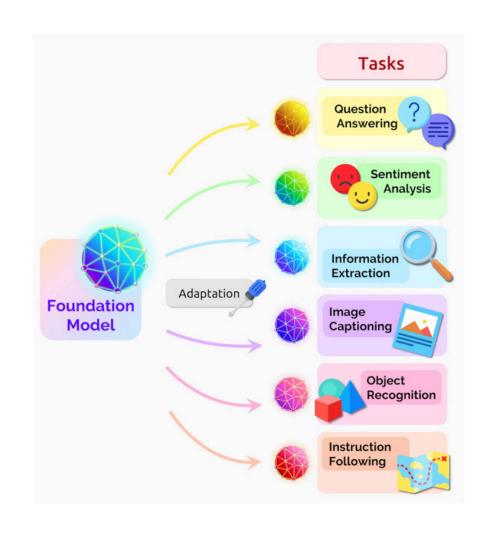
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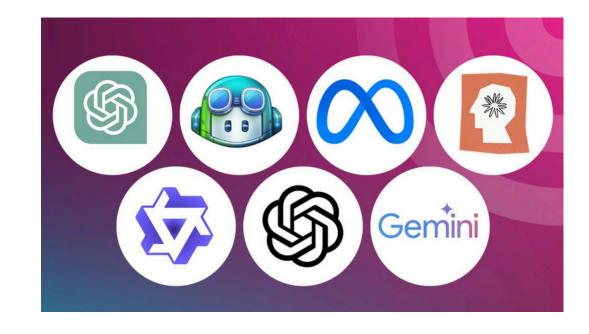
Bitter lesson:

"... building in how we think we think does not work in the long run."



How will recent AI breakthroughs impact physics?







Foundation models for science

Large language models (LLMs)

Agents



Questions



