

The Philosophy of Contemporary and Future Science Seminar Series

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presents

Two Dimensions of Opacity and the Deep Learning Predicament

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Abstract

Deep neural networks have become increasingly successful in applications from biology to cosmology to social science. Trained DNNs, moreover, correspond to models that ideally allow the prediction of new phenomena. Building in part on the literature on 'eXplainable AI', I here argue that these models are instrumental in a sense that makes them non-explanatory, and that their automated generation is opaque in a unique way. This combination implies the possibility of an unprecedented gap between discovery and explanation: When unsupervised models are successfully used in exploratory contexts, scientists face a whole new challenge in forming the concepts required for understanding underlying mechanisms.

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Time: 8:00AM GMT/4:00PM HKT

Zoom:

<https://lingnan.zoom.us/j/93217695454?pwd=ZWtmVnFteGs0YVIPd2tKZUdCSTdDdz09>



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