Ellis

How Can Physics Underlie the Mind?

Top-Down Causation in the Human Context

Physics underlies all complexity, including our own existence: how is this possible? How can our own lives emerge from interactions of electrons, protons, and neutrons? This book considers the interaction of physical and non-physical causation in complex systems such as living beings, and in particular in the human brain, relating this to the emergence of higher levels of complexity with real causal powers. In particular it explores the idea of top-down causation, which is the key effect allowing the emergence of true complexity and also enables the causal efficacy of non-physical entities, including the value of money, social conventions, and ethical choices.

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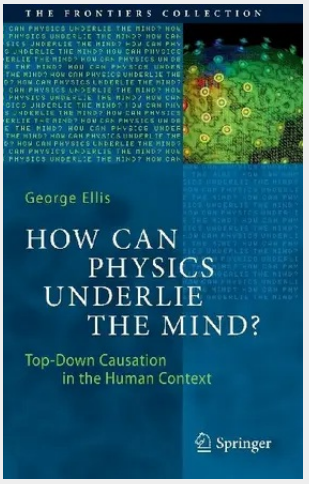

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