End-of-the-World Branes and the Beginning of the Universe

Wednesday 9 July 2025 10:00 (30 minutes)

I will start by explaining in which precise sense the Measure Problem remains important even though our picture of the Landscape may have changed. I will then argue for a fundamental, quantum mechanical approach, which suggests that conditions on the initial state of the universe are, in fact, decisive. Thus, arguably, Cosmological Initial Condition Problem is a more fitting term. I will discuss the Hartle-Hawking and Linde-Vilenkin proposals explaining that there are good reasons to take the latter seriously. This implies that End-of-the-World branes are absolutely crucial for inflationary and other predictions, leading to well-defined challenges for future research.

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