

# Space-Time and Probability

Saunders, Simon (2000) Space-Time and Probability.

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## Abstract

Special relativity is most naturally formulated as a theory of spacetime geometry, but within the spacetime framework probability appears to be a purely epistemic notion. It is possible that progress can be made with rather different approaches - covariant stochastic equations, in particular - but the results to date are not encouraging. However, it seems a non-epistemic notion of probability can be made out in Minkowski space on Everett's terms.

I shall work throughout with the consistent histories formalism. I shall start with a conservative interpretation, and then go on to Everett's

**Keywords:** Probability, Relativistic Quantum Theory, consistent histories, Everett

[Specific Sciences: Probability/Statistics](#)

**Subjects:** [Specific Sciences: Physics: Relativity Theory](#)

[Specific Sciences: Physics: Statistical Mechanics/Thermodynamics](#)

[Specific Sciences: Physics: Quantum Mechanics](#)

**ID Code:** 414

**Deposited By:** [Saunders, Simon W.](#)

**Deposited On:** 29 October 2001

**Alternative Locations:** <http://users.ox.ac.uk/~symbol{126}lina0174/Saunders.html>