

# Interpreting spontaneous collapse theories

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## Abstract

Spontaneous collapse theories of quantum mechanics require an interpretation if their claim to solve the measurement problem is to be vindicated. The most straightforward interpretation rule, the fuzzy link, generates a violation of common sense known as the counting anomaly. Recently, a consensus has developed that the mass density link provides an appropriate interpretation of spontaneous collapse theories that avoids the counting anomaly. In this paper, I argue that the mass density link violates common sense in just as striking a way as the fuzzy link, and hence should not be regarded as a problem-free alternative to the fuzzy link. Hence advocates of spontaneous collapse theories must accept some violation of common sense, although this is not necessarily fatal to their project.

**Keywords:** Spontaneous collapse; Spontaneous localization; Dynamical reduction; GRW theory; Fuzzy link; Mass density link; Counting anomaly

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