

Feller's paradox and the ever-fluctuating enzyme

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The remaining travel time of a train shortens with every minute that passes from its departure; and the flame diminishes the candle with every second it burns. These everyday occurrences bias our intuition to think that processes that have already begun will end sooner than ones that have just started; But Feller's paradox provides ample counter example to show that this is not true in general. In this talk, I will describe Feller's paradox and explain how it is related to a series of surprising developments in our understanding of enzymatic catalysis at the single-molecule level. The intimate connection with the problem of first-passage under restart will also be discussed.