



Effects of Multiplicative Colored Noise on Bacteria Growth

<http://www.firstlight.cn> 2007-09-30

We use the logistic growth model to describe the bacterium growth in the presence of a Gaussian colored noise. The effects of multiplicative colored noise on the steady state probability distribution of the bacterium growth were investigated. Our results show that increasing the strength of the multiplicative colored noise may lead to decreasing bacterium number and even bacterium extinction. Our studies also indicate that increasing the correlate time of the noise may facilitate the bacterium growth to some extent.

[存档文本](#)