Looking Forward… Looking Inward

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DNA is programmable
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- all of these are examples of stochastic processes
- challenges: predict their behavior, and learn to control errors that may arise

stochastic model: tiles from a pool associate and dissociate from a single aggregate
f(c): association rate of a tile type of concentration c to aggregate
r(b): disassociation rate of tile with b matching edges from aggregate
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- Can we provide mathematical insights or proofs of the following observations:
  - “slight quantitative variations in the model parameters can lead to striking qualitative differences in the observed error morphologies”
  - doubling the concentrations of T-00 and T-11 tiles leads to “a statistical preference for all-zero patches [which] actually increases the frequency and size of perfect Sierpinski patterns”

Reference