NONEQUILIBRIUM-INDUCED KINETIC SELECTION: PATTERN RECOGNITION

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When a system is driven or agitated, its kinetics shows up in its steady behavior, also for its static fluctuations — in sharp contrast with equilibrium systems. This implies that the time-symmetric fluctuation sector, governed by the so-called *frenesy*, may select the statistical behavior of population occupations. We give an application where we show how that effect may be used for understanding pattern recognition or associative memory more generally, in joint work with Bram Lefebvre. Such mechanism may be relevant for the understanding of pattern recognition in biological systems, and offers a bio-realistic alternative to the design and selection of intelligence.

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