

BERNOULLIS TAFELRUNDE

GRADUATE STUDENT SEMINAR

Thursday, 3 October 2019, 12:15-13:00

Seminarraum 05.002, Spiegelgasse 5

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Pricescapes — Competitive Pricing Landscapes

ABSTRACT

Macro-economic dynamics are described, modelled and interpreted using tools from complex adaptive systems theory. Using Kauffman's rendition of Sewall Wright's original "fitness landscape" ideas, with (intrinsic) location parameters, (extrinsic) intensity parameters and epistatic interactions an economic combinatorial phase space is defined. Main focus is put on a pricing state space ("pricescape") to study that system's macro topology and to use geometric insights in understanding pathways and dynamics. This general concept is then employed to understand the makeup and dynamics of a set of commercially relevant antibiotics. This is finally interpreted as a landscape of different economic configurations, allowing to study the commercial fate of competing products in well-described terms of clusters such as market leaders, niche players and competing generic products. These clusters do not exist in a simple equilibrium or in utter chaos, but rather as a periodic order of evolutionary progress.