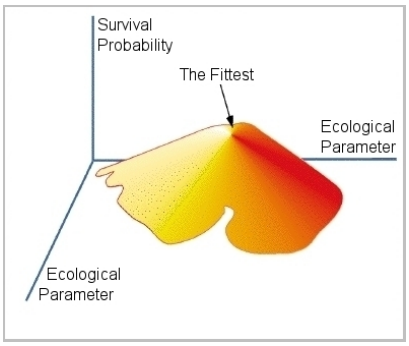
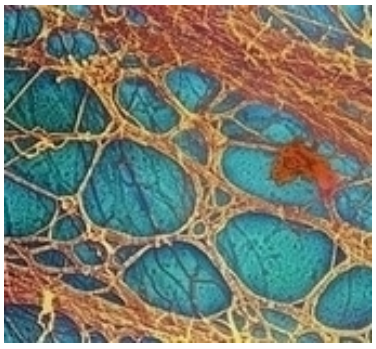
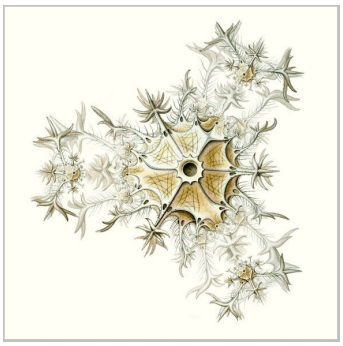
Prof. Dr. U. Behn, Prof. Dr. K. Kroy SoSe 2010

Hauptseminar
Theorie kondensierter Materie

WITH STUDENT TALKS IN GERMAN OR ENGLISH







POSSIBLE TOPICS INCLUDE:

SCALING IN BIOLOGY; NETWORKS; POPULATION DYNAMICS; POPULATION GENETICS; GAME THEORY; SELF–PROPELLED PARTICLES; SWIMMING AT LOW REYNOLDS NUMBERS; SYSTEMS BIOLOGY; PHYSICS OF DNA; PROTEOMICS; EXPERIMENTAL CELL BIOPHYSICS; PERCOLATION; TASEP; SIMPLE POLYMER MODELS; DOMAIN WALLS, SOLITONS AND MEMBRANES; RANDOM MATRIX THEORY; GRANULAR TEMPERATURE; NONLINEAR DYNAMICS; STATISTICAL INFERENCE; SYSTEMS WITH TEMPORAL DELAY; NONEQUILIBRIUM FLUCTUATIONS; NOISE INDUCED PHENOMENA

AIM:

The aim of this seminar is twofold. First, to learn some essential background for entering the current debates on hot topics in Condensed Matter Theory, Statistical Physics and Theoretical Biophysics. Second, to give participants a chance to improve urgently needed but rarely taught soft skills.

COORDINATES:

Thursday 11:00–12:30 (starting 08.04.10), großer Seminarraum, ITP

USEFUL BACKGROUND:

Theoretical Mechanics, Statistical Mechanics, Biophysics