Thermal Equilibrium and Nonequilibrium [nln1]

Equilibrium State	Nonequilibrium State		
at equilibrium	near equilibrium	far from equilibrium	
principle of maximum entropy	principle of minimum entropy production	nonlinear dynamics and fluctuations	
quasi-static processes	irreversible processes	stochastic processes	
fluctuations at equilibrium static and dynamic correlation functions	linear response to static and dynamic external fields		
(computational probes)	(experimental probes)		
fluctuation–dissipation theorem			

Distinguish independently between

- equilibrium and nonequilibrium situations,
- time-independent and time-dependent phenomena.

	equilibrium situation	nonequilibrium situation
time–independent phenomena	equal–time correlations	equal-time correlations in steady states
time–dependent phenomena	delayed-time correlations	delayed–time correlations in steady states any correlations in non–steady states