





Perturbation theory and secular interactions
Nonlinear continuum mechanics

Dynamics of incompressible and compressible fluids
Vortices and turbulence in geophysical flows
Turbulent jets

Dynamics of glaciers and planetary disks

Linear and nonlinear stability and evolution
Nonlinear waves and modes
Fluid resonances
Particle resonances
Nonlinear optics

Quantum chaos

Nonlinear systems

Noise and synchronization of regular
Noise: white, pink, blue

Nonlinear systems

Nonlinear systems

Stock market

analysis

Nonlinear modeling and forecasting in time series