In the name of God

Department of Physics Shahid Beheshti University

STOCHASTIC PROCESSES

Exercise Set 12

(Due Date: 1401/04/01)

1. Fractal and multifractal analysis of a typical 1 + 1-dimensional data:

According to paper "Hajian, S., and M. Sadegh Movahed. "Multifractal detrended cross-correlation analysis of sunspot numbers and river flow fluctuations." Physica A: Statistical Mechanics and its Applications 389.21 (2010): 4942-4957", write a computational program to compute generalized Hurst exponent of given series.