## Abstract Submitted for the MAR08 Meeting of The American Physical Society

Estimating Granger causality from Fourier and wavelet transforms of time series data MUKESH DHAMALA, Georgia State University — Experiments in many fields of science and engineering yield data in the form of time series. The Fourier and wavelet transform-based nonparametric methods are used widely to study the spectral characteristics of these time series data. We have recently extended the framework of nonparametric spectral methods to include the estimation of Granger causality spectra for assessing directionalinfluences. We illustrate the utility of the proposed methods using artificial data and real brain data

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Date submitted: 27 Nov 2007 Electronic form version 1.4