
Subject: 1D -> 2D Power Spectrum
Posted by [jl0477](#) on Wed, 19 Jun 2002 08:45:33 GMT
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Hi All,

Here is my problem, half Physics, half IDL:

I have got a 1D Power Spectrum computed from a profile of a rough surface.

I would like to extend these results to 2D Power spectrum, assuming that the surface is isotropic.

Is there an easy way to go from one to the other?

(Without doing an Hankel transform of the 1D autocorrelation function. I have convergence problems with my own routine and discontinuities appear with the function of William Thompson. I think that is because I use real data and the autocorrelation function I try to Fourier-Bessel transform do not converge to zero but oscillate around positive and negative values...)

Ps: Thanks to Bill Thompson for his help for the hankel transf.
