Subject: Re: spectral estimation e.g., MEM, MUSIC Posted by Jeff Kommers on Thu, 15 Jan 1998 08:00:00 GMT View Forum Message <> Reply to Message

There is a text by S. Lawrence Marple Jr. called "Digital Spectral Analysis with Applications". It comes with some Fortran codes that implement the various spectral analysis techniques, including Burg's algorithm and MUSIC.

I have written a set of IDL and C wrappers for these Fortran codes so that I can call them from IDL using call_external(). If you are interested, post or send me e-mail.

I must warn that using the Fortran codes on different platforms produced very different results using the test data supplied by Marple. It appears to be a dependence on floating point implementation: I got different results using a VAX, Sun (single precision), and Sun (double precision). The spectra are qualitatively similar, but the actual numbers differ by as much as 10 percent using the modified covariance estimator (MODCOVAR). (!)

Jeff