Subject: Re: Cauchy PV integration
Posted by Craig Markwardt on Tue, 25 Apr 2006 08:58:32 GMT
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"metachronist" <rkombiyil@gmail.com> writes:
> Dear All,
> I am interested in computing the Cauchy Principal Value integral, in
> general of the form:
> integral from -inf to +inf [f(x) w(x) dx] where w(x) is of the form:
> 1/(x-t) I need to evaluate the integral between some real limits (not
> infinity) which has multiple singularities between the beginning and
> end points. I was wondering if IDL has any routines similar to
> quadpack? ...

Hi, I translated most of quadpack to IDL (the QPINT1D function). It includes the capability to integrate over singularities, and to handle improper integrals (where the integration limits -> infinity).

Hopefully that is what you are looking for!
Good luck,
Craig

http://cow.physics.wisc.edu/~craigm/idl/math.html

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