Subject: Re: Optimization "AMOEBA"
Posted by Nicki on Fri, 18 Sep 2009 13:05:13 GMT
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O thanks so much for that... Just tried it also with my more
complicated function and it works... But now it's getting tricky:)
I have a 2nd varible...
this is set to 60 at the beginning and should vary plus/minus 30.
However my IDL cannot do it, it can only do scale 1, everything that
is more than one does not work out.....

That's the code:

```
FUNCTION FUNC, P

z=120.0
N_rows=3.0
d_fov=67
mu=438.689
R_tot=1.5
a_max=30
N=P[1]
R_i=P[0]
;a_max=P[2]

x=N*tan(a_max/2.0*!pi/180.0)*1.1/N_rows/!pi-1.0

a=2.0*asin((1.0/x+1.0)*d_fov/2/z)*180/!pi

 d=sqrt(R_tot^2-x^2*(R_i)^2)/(x+1)-alog(2)/mu*tan(a/2*!pi/180 )

 S=N*(1+x)^2/16/x^2/z^2*(d^2+2/mu*d*tan(a/2*!pi/180)+2/mu^2*( tan(a/2*!
pi/180))^2)*100

RETURN, -S

END


R=AMOEBA(1.e-1, SCALE=[0.50, 30.], P0=[0.55, 60.],
FUNCTION_VALUE=fval)

;Check for convergence:
;IF N_ELEMENTS(R) EQ 1 THEN MESSAGE, 'AMOEBA failed to converge'

; Print results:
PRINT, 'R_i, N:', r, $
     'function value: ', fval[0]
```

END