
Subject: Re: Optimization "AMOEBA"

Posted by [Wout De Nolf](#) on Thu, 24 Sep 2009 07:37:31 GMT

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On Wed, 23 Sep 2009 18:04:46 -0700 (PDT), Nicki
<nickireiter87@yahoo.de> wrote:

> Wuhuu, thank you. The last part does not work though (plot), i just
> commented it out and try to fix it later since the plot is right now
> not that important.
> so now, just that i understand everything...What do I need to change
> and take care of when i also have a 3rd, 4th and maybe even a 5th
> variable?? I don't have to change the function constraint, do i? (the
> next thing will be letting a_max go from 20 to 80.

Constraint will work with any number of variables. To understand what
this function does, try this:

```
x=indgen(100)-50  
P0=50.  
dP=10.  
plot,x,P0+2.*dP/!pi*atan(x),/ys
```

The parameter x is always projected between 40 and 60.

Thinking about it, you should probably start AMOEBA with P0=[0,0.]
R=AMOEBA(1.0e-5,SCALE=dP, P0=[0,0.], FUNCTION_VALUE=fval)

> If there is for a
> specific N, a_max and R_i a "NaN" it won't stop the approximation,
> will it?!(i hope you know what i mean))

The constraint function puts box-constraints around each parameter. If
you don't have a box (i.e. the boundaries depend on the value of other
parameters) you need a more complicated constraint function.
