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Subject: Re: Solving equation with Monte Carlo simulation  
Posted by [John H West](#) on Thu, 21 Jan 1999 08:00:00 GMT  
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Jean Marc Zanotti wrote:

> I'm looking for a Monte-Carlo programm (C, Fortran, IDL...) that  
> could be used to solve the following problem:  
>  
>  $F(w) = \text{Integration}(G(w,u).H(u), u=-\text{infinity}, +\text{infinity})$   
>  
> The functions  $F(w)$  is known numerically.  
>  $G(w,u)$  is of the form:  
>  $G(w,u) = \text{Sigma}(u) \cdot \exp(-(1/\text{sigma}(u)^2) \cdot (w + \text{delta}(u))^2)$   
> where  $\text{Sigma}(u)$  and  $\text{delta}(u)$  are two functions of  $u$ .  
>  
> The problem is to find numerically,  $h(t)$ , the Fourier transform of  $H$ .  
> It seems difficult to apply the convolution theorem.  
>  
> If someone has experience, information or a clever idea on the way to  
> solve this sort of problems, please tell me,  
> Thank you.  
>  
> JMarc

\_Numerical\_Recipes\_in\_C\_ has, according to the index, several  
references listed under "Monte Carlo"

Take a look in <http://www.nr.com> , or see if you can find a copy  
of the text local to you.

john

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