

# Re: experimental measurement of electron diameter?

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*Source:* <http://sci.tech-archive.net/Archive/sci.physics/2005-07/msg01091.html>

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- *From:* [mmeron@xxxxxxxxxxxxxxxxxxxx](mailto:mmeron@xxxxxxxxxxxxxxxxxxxx)
  - *Date:* Wed, 13 Jul 2005 04:48:03 GMT
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In article <db1sr101tko@xxxxxxxxxxxxxxxxxxxx>, Bob Cain <arcane@xxxxxxxxxxxxxxxxxxxx> writes:

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>mmeron@xxxxxxxxxxxxxxxxxxxx wrote:

>

>> In applications you'll find the term "form factor". The cross section  
>> of a finite size target is of the form of a convolution of a cross  
>> section for a zero sized one and a form factor representing the  
>> distribution of whatever it is in the target that does the interacting  
>> (so the form factor for a point target is a delta function). Thus, if  
>> there is a difference between the measured cross section and the  
>> theoretical one for point target, you can use this difference to  
>> estimate the size and often even the distribution.

>

>Thank you! I actually understand that. :-)

>

Oh, I was sure you will. Just forgot to add that the business of comparing cross section for a point target with this for a finite size one is pretty much the same as comparing a circuit response to an impulse (delta function) signal, with this to a signal of finite width. Same idea.

Mati Meron | "When you argue with a fool,  
meron@xxxxxxxxxxxxxxxxxxxx | chances are he is doing just the same"

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- *Follow-Ups:*
  - ◆ [\*Re: experimental measurement of electron diameter?\*](#)  
◇ *From:* Bob Cain
- *References:*
  - ◆ [\*experimental measurement of electron diameter?\*](#)  
◇ *From:* Ron Baker, Pluralitas!
  - ◆ [\*Re: experimental measurement of electron diameter?\*](#)  
◇ *From:* Uncle Al

Re: experimental measurement of electron diameter?

◆ *Re: experimental measurement of electron diameter?*

◇ *From:* Bob Cain

◆ *Re: experimental measurem*