



Milind Diwan &lt;milind.diwan@gmail.com&gt;

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## [Fwd: Re: Sensitivities for the WNSLL experiment]

1 message

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Milind Diwan <diwan@bnl.gov>  
To: Milind Diwan <milind.diwan@gmail.com>

Fri, Feb 15, 2008 at 4:57 PM

----- Original Message -----

Subject: Re: Sensitivities for the WNSLL experiment  
Date: Fri, 15 Feb 2008 13:45:42 -0600  
From: Mark Dierckxsens <[mdier@hep.uchicago.edu](mailto:mdier@hep.uchicago.edu)>  
To: Milind Diwan <[diwan@bnl.gov](mailto:diwan@bnl.gov)>  
CC: Mary Bishai <[mbishai@bnl.gov](mailto:mbishai@bnl.gov)>  
References: <[47B4C985.2080703@hep.uchicago.edu](mailto:47B4C985.2080703@hep.uchicago.edu)> <[47B5AF68.10804@bnl.gov](mailto:47B5AF68.10804@bnl.gov)>

Hi,

The noscerr plots should be there now too as well as the nova style plots. Those have \_lin in there name and there should be one in the thetalimit and one in the hierarchy subdirectory. These plots have the same CL lines and layout as the attached nova plots, which I took from the presentation at NuFact07.

It is interesting to notice that 3 years of running a 100kt water cherenkov at dusel gets roughly the same sensitivity to the mass hierarchy as 6 yrs of nova and t2k combined. I think this is an important selling point.

Mark

Milind Diwan wrote:

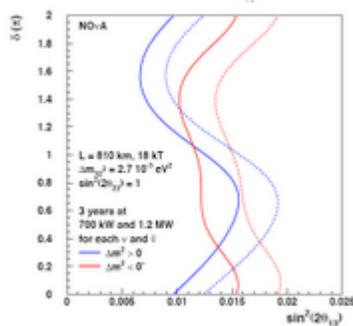
> Mark:  
>  
> Are they the noscerr variety ?  
>  
> I need both our normal style and noscerr.  
>  
> regards,  
> Milind  
>  
> Mark Dierckxsens wrote:  
>  
>> Hi Milind,  
>>

>> The sensitivities for the 100kt WCC detector are now available at:  
 >>  
 >> <http://nwg.phy.bnl.gov/~mdier/bnl/nwg/longbaseline/60GeV/WCC/100kt/60+60/>  
 >>  
 >> They are in exactly the same style as I have been making them before.  
 >>  
 >> I will produces 2 nova style plots so the sensitivities can be compared  
 >> directly:  
 >> 1) 3sigma sensitivities to non-zero  $\theta_{13}$  for normal and inverted  
 >> hierarchy on a linear  $\sin^2 2\theta_{13}$  scale from 0 to 0.025  
 >> 2) 95% CL sensitivity to mass hierarchy on a linear  $\sin^2 2\theta_{13}$  scale from  
 >> 0 to 0.16  
 >>  
 >> These where two "recent" nova plots I could find (had 18kt). If you have  
 >> another layout in mind, let me know.  
 >>  
 >> Mark  
 >>  
 >  
 >  
 >

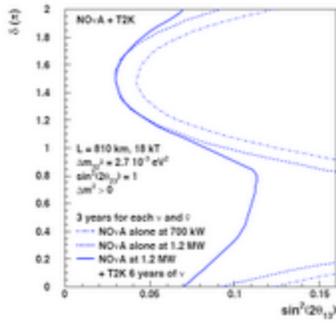
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Regards  
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## 2 attachments



nova\_thetalimit.png  
 27K



nova\_hierarchy.png  
27K