Subject: pbar p cross section data Posted by Klaus Götzen on Mon, 16 Jun 2014 14:18:40 GMT

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Hi all,

in case you are looking for possible backgrounds for your physics analysis signal channel or simply are interested in current pbarp cross section data for some channels, I created a tool which allows you to browse through available data (limited to rather well measured and strong channels). It also lets you search for channels similar to a given final state or compare experimental cross-section data with DPM cross sections.

You can find it here: http://lxpndwww.gsi.de/pbarx/

Best, Klaus

Subject: Re: pbar p cross section data Posted by MartinJGaluska on Mon, 16 Jun 2014 14:44:50 GMT View Forum Message <> Reply to Message

Hello Klaus,

that is a great website / feature.

One suggestion:

Quote:

Fields '+chrg' and '+neut' are the number of additionally allow charged or neutrals in a possible background reaction to be listed.

After I first read this description, I was not sure how the two numbers will be interpreted and I had to play with the settings to figure it out. Adding max. in the description possibly makes it a little easier to be interpreted correctly.

Quote:

Fields '+chrg' / '+neut' are the max. number of additionally allowed charged / neutral particles in a possible background reaction to be listed.

Kind regards, Martin

Subject: Re: pbar p cross section data

Posted by Klaus Götzen on Mon, 16 Jun 2014 16:05:45 GMT

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Hi Martin,
thanks for the suggestion!
Best, Klaus
Subject: Re: pbar p cross section data Posted by Johan Messchendorp on Mon, 16 Jun 2014 20:42:12 GMT View Forum Message <> Reply to Message
a very nice tool thx,
Johan.

Subject: Re: pbar p cross section data Posted by Anastasia Karavdina on Sat, 30 Aug 2014 08:02:33 GMT View Forum Message <> Reply to Message

Dear Klaus,

Thank you very much for such nice and very useful tool! But I have at least one question: what is the source for the data? On the page I found the references:

[1] CERN HERA 84-01

[2] PANDA Note 'Classification of Pbar P induced reactions', A. Dbeyssi et al

If they are the source, I wonder did you insert all data manually?

Subject: Re: pbar p cross section data Posted by Klaus Götzen on Sat, 30 Aug 2014 19:19:27 GMT View Forum Message <> Reply to Message

Dear Anastasia,

thanks! Partially I got electronic data from Alaa (the part which is in his publication), the rest I indeed put in by hand from ref [1]. Unfortunately it's not as complete as I'd liked to have it. If you need the data electronically you should either be able to copy it from the tool (this is the reason why I list it for each individual channel), or I can send it to you via e-mail.

Best, Klaus