

## 2021-04-08 MICE Special VC

Chris introduced the special VC. The aim is to review and have more discussion on the scattering paper, which was cut short at the CM due to lack of time.

John Nugent reminded us of his analysis.

Dan: the asymmetry does not look as strong as I remember. You were going to force symmetry on the empty data set? John Nugent: I have not done that yet.

Dan: slides 21 and 22 – what is the significance of the fit line on the acceptance cuts? John: I use the fit to correct the data to avoid noise. Dan: What is the fit? John Nugent: it is a 6<sup>th</sup> order polynomial even terms only. Dan: maybe it could be fit better? John Nugent: it looks quite tricky. I did my best. I tried a few different functions. Dan: there is an asymmetry in the MC. Paul: yes, we did a symmetric fit because we thought it was unlikely to be physical. John: I will try to investigate.

John Cobb: there is the worrying asymmetry in the deconvolution plot. The claim is that it is due to low statistics in the empty channel. But it is not pulled in the forwards deconvolution. Could it be that the deconvolution does something. John Nugent: we resample the empty data set many times so that the asymmetry is not such a strong effect. With a high statistics toy model we don't get an asymmetry. John Cobb: theta x and theta y both show the same asymmetry. This looks systematic. John Nugent: I will rerun the analysis starting at the other bin. Paul: resymmetrise the empty data. Or smear the empty data?