

PEER REVIEW OF: FERMILAB-POSTER-23-198-ND-STUDENT

I'm writing this as a peer review of "Examining ICARUS Cosmic Muon Signal Shapes" by Nicolas Patino. Nicolas's poster was overall excellent work. There were not too many words and quite a few plots to look at. The presentation of the poster was informative. Reading it I understood that his project involved quantifying ICARUS detector systematic uncertainties. The focus of the research was studying how well detector simulation data fit a Gaussian distribution. The poster appeared moderately well-researched, although a few citations would definitely have improved the poster. The poster was organized fairly logically. Nicolas discusses the background of his project in the first section. Then he dives into greater detail about the specific physics and mathematics relevant to his project. He puts important information in bold, which is really helpful. Reading his poster, I know that he worked with Monte Carlo simulations and Gaussian distributions. Nicolas's excellent poster has a clear introduction and conclusion. In the conclusion, he discusses the implications of his research to future work. The author of the poster makes strong use of visual resources, image design, and layout to tell a compelling story about his exciting research. I think the length of the text paragraphs is very readable and not too technical, but it could be improved to explain things more clearly, especially the section "Cosmic Muon Waveforms." When I read that section, I find it difficult to follow. I think the poster has an appropriate number of pictures and plots, but some plots could be improved, especially with regards to the labeling of the axes. The author did a good job of presenting his research when I talked to him and he was very helpful in clarifying and answering my questions. Overall, this is a most excellent research poster with some very small flaws. I am excited to read more about where Nicolas's research goes.

