

Abstract Submitted
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Shimming the Muon $g-2$ Magnet PAUL NEBRES, Fermilab, MUON G-2 COLLABORATION — The Muon $g-2$ experiment at Fermilab will determine the anomalous magnetic moment of the muon. A deviation between this experimental result and the Standard Model theoretical calculation has the potential to reveal New Physics. In the experiment, muons are contained in a storage ring with a highly uniform magnetic field. We will achieve the required field uniformity through a process called shimming, which involves mapping the field and adjusting components of the storage ring to tune the field appropriately. In this talk, I will describe the design of the tools used in this process and explain the procedure for mapping the magnetic field.

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