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Direct Muon Production in a Large Acceptance Spectrometer at FNAL.*† K. T. MC DONALD, K. J. ANDERSON, J. G. BRANSON, G. G. HENRY, J. E. PILCHER, E. I. ROSENBERG, G. H. SANDERS, A. J. S. SMITH, and J. J. THALER. University of Chicago and Princeton University.--In short test run, the FNAL Chicago Cyclotron Magnet Spectrometer was used with a single muon trigger to study direct muon production at low pl. The broad acceptance of the spectrometer enabled us to detect any additional muons which may be produced in the forward hemisphere. The background due to the muonic decay of hadrons was measured by varying the distance between the production target and a 1.2 m thick slab of Fe which served as a hadron absorber. Preliminary results on the ratio of single muon to mu pair production will be presented.

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To follow abstract entitled "Dependence of Dimuon Production on Incident Energy, Incident Particle Type and on Nuclear Target," submitted by A. J. S. SMITH.

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