Search for Narrow di-Muon Resonances in a Wide Mass Range
MICHAEL SCHMITT, Northwestern University, JANE NACHTMAN, FNAL, CDF COLLABORATION — A search for narrow di-muon resonances has been conducted with data collected by the CDF Collaboration. A very wide mass range is examined, extending from the $J/\psi$ resonance to the highest reach of the Tevatron. An innovative statistical treatment is employed allowing a minimal reliance on simulations. Results are interpreted in a model-independent framework allowing limits to be placed on the production of $Z'$ resonances of almost any mass.