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Observation of the $\omega\pi^o$ and $\omega\eta$ final states in the reaction $\pi^- p \rightarrow n\pi^+\pi^-4\gamma$ at 18 GeV/c. Z. BAR-YAM, J. P. CUMMINGS, J. P. DOWD, P. EUGENIO, M. HAYEK, W. KERN, E. KING, *Massachusetts Dartmouth*, S. U. CHUNG, R. W. HACKENBURG, C. OLCHANSKI, D. P. WEYGAND, H. J. WILLUTZKI, *B. N. L.*, B. B. BRABSON, R. R. CRITTENDEN, A. R. DZIERBA, J. GUNTER, R. LINDENBUSCH, D. R. RUST, E. SCOTT, P. T. SMITH, T. SULANKE, S. TEIGE, *Indiana*, S. DENISOV, A. DUSHKIN, V. KOCHETKOV, I. SHEIN, A. SOLDATOV, *IHEP Protvino*, E. V. ANOSHINA, V.A. BODYAGIN, A. M. GRIBUSHIN, O. L. KODOLOVA, V. L. KOROTKIKH, M. A. KOSTIN, A. I. OSTROVIDOV, L. I. SARYCHEVA, N. B. SINEV, I. N. VARDANYAN, A. A. YESHOV, *Moscow State*, D. S. BROWN, T. K. PEDLAR, K. K. SETH, J. WISE, D. ZHAO, *Northwestern*, T. ADAMS, J. M. BISHOP, N. M. CASON, J. M. LOSECCO, J. J. MANAK, A. H. SANJARI, W. D. SHEPHARD, D. L. STIENIKE, S. A. TAEGAR, D. R. THOMPSON, *Notre Dame*, G. S. ADAMS, J. KUHN, J. NAPOLITANO, M. NOZAR, J. A. SMITH, D. B. WHITE, M. WITKOWSKI, *R. P. I.* — Results are presented on a study of resonant structure in $\omega\pi^o$ and $\omega\eta$ final states produced in π^-p interactions at 18 GeV/c where $\omega \rightarrow \pi^+\pi^-\pi^o$, $pi^o \rightarrow 2\gamma$, and $\eta \rightarrow 2\gamma$. Final states such as $\omega\pi^o$ and $\omega\eta$ containing a vector meson are expected in the extended flux-tube model for the decay of hybrid mesons. For the $\omega\pi^o$ final state, our data exhibit the well-know $b_1(1235)$ and the $\rho_3(1690)$. A one pion exchange mechanism is clearly seen for the $\rho_3(1690)$. A partial wave analysis of both $\omega\pi^o$ and $\omega\eta$ is currently in progress.

[X] Prefer Oral Session
[ ] Prefer Poster Session

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