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$\rho - \phi$ Relative Production Phase Using Dimuons VALERIA FRISULLO, JOHN CUMALAT, University of Colorado, FOCUS COLLABORATION — The $\rho - \phi$ production phase is determined using a sample of quasielastically photoproduced $\mu^+\mu^-$ events obtained in the FOCUS experiment at Fermi National Accelerator Laboratory. The measurement is accomplished by correcting for the Bethe-Heitler dimuon production and by fitting for interference between the $\rho \to \mu^+\mu^-$ and $\phi \to \mu^+\mu^-$ final states. This result represents the first direct measurement of the $\rho - \phi$ production phase. A preliminary study of the $\omega \to \mu^+\mu^-\pi^0$ decay channel is also presented.

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