Search for New Physics in the Exclusive Delayed $\gamma + \text{MET}$ Final State

Many forms of Gauge Mediated Supersymmetry Breaking (GMSB) predict a $\tilde{\chi}_1^0$ with long lifetimes. In certain models with General Gauge Mediation, only the $\tilde{\chi}_1^0$ and $\tilde{G}$ are kinematically accessible at the Tevatron. In these cases, current limits do not apply. Supersymmetric production would occur primarily through $h \rightarrow \tilde{\chi}_1^0 \tilde{\chi}_1^0 \rightarrow \gamma \tilde{G} \gamma \tilde{G}$. I will discuss the CDF search for long-lived $\tilde{\chi}_1^0$ in the exclusive delayed $\gamma + \text{MET}$ final state and show preliminary results.

Tuesday
April 3, 12:15pm
301 Physical Sciences Building
(Pizza, 12:00pm)