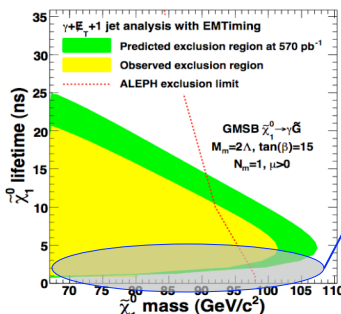




Setting Limits on GMSB in $\gamma\gamma + E_T$

R. Culbertson, M. Goncharov, E. Lee, A. Pronko, D. Toback

CDF NOTE 9575



- Looking for $\tilde{\chi}_1^0 \rightarrow \gamma + \tilde{G}$
- $\gamma\gamma + E_T$: Optimal for low lifetimes (t=0 and 1 ns)
- Predict a shape of fake E_T by **Met Resolution Model** (CDF9184)
 - : remove dominant bkg (QCD)
- New since 202 pb⁻¹:
13 times more data, EMTiming, Met Significance Estimate

single delayed photon
 PRL 99, 121801
 (2007)
 PRD 78, 032015
 (2008)

$H_T > 200$ GeV
 $\Delta\phi(\gamma_1, \gamma_2) < \pi - 0.35$ rad
MetSig > 3

Observed	0 event
Expected	$1.2 \pm 0.3 \pm 0.2$

CDF Weekly Meeting

