

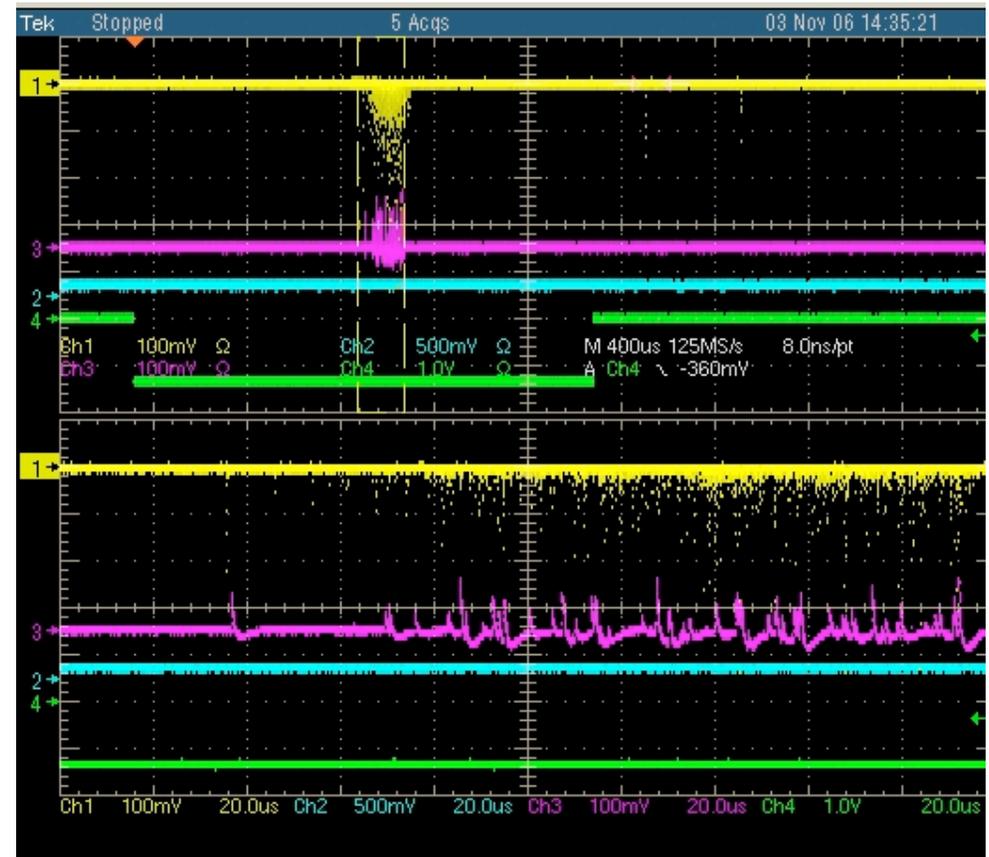


MuCool



201 MHz Rf Backgrounds

Yağmur Torun, IIT
NFMCC Weekly Meeting
Dec 1, 2006 - Fermilab



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Backgrounds from 201 MHz Cavity



- Ran at $B=0$ Nov 2-3, up to 12MV/m, 150us flattop
- Counted rates only
 - 2 detectors
 - NaI crystal: 1.5" dia x 2" thick
 - Scintillator paddle: 14 x 14 x 0.5"
 - 4.7m from cavity, similar to MICE TOF
 - Material in between (cavity wall, detectors, Fe pipes)
 - 8MV/m: 36 counts/pulse crystal, 780/pulse crystal
 - 26kHz/cm² (40 assumed in MICE proposal)
 - Lots of interesting structure
- Will try to repeat next week with spectrum readout and extend to higher gradients

Backgrounds from 201 MHz Cavity

