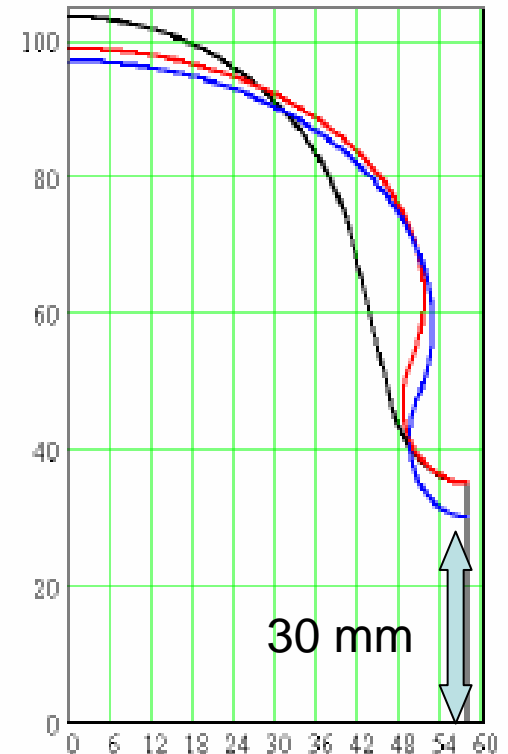
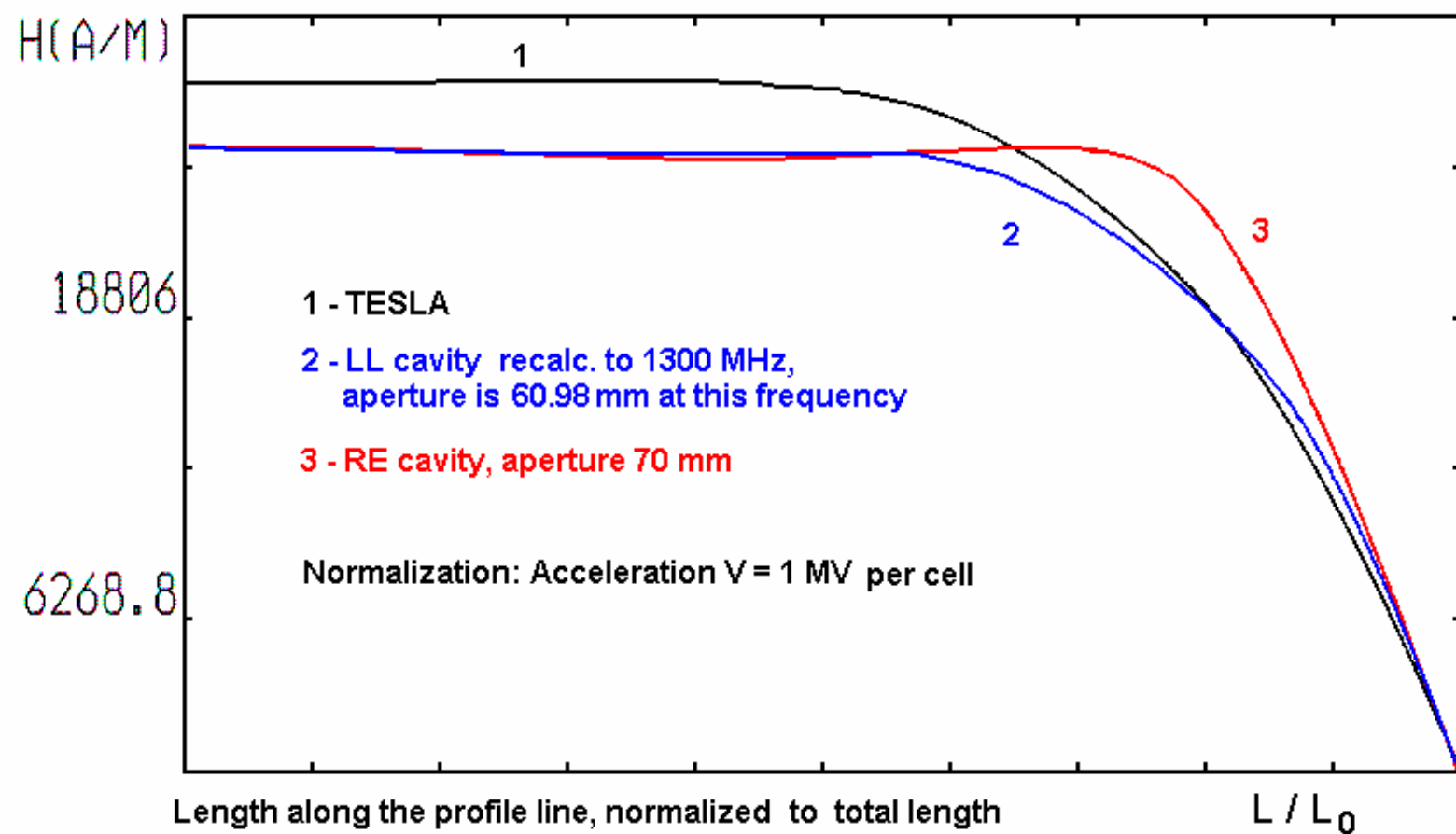
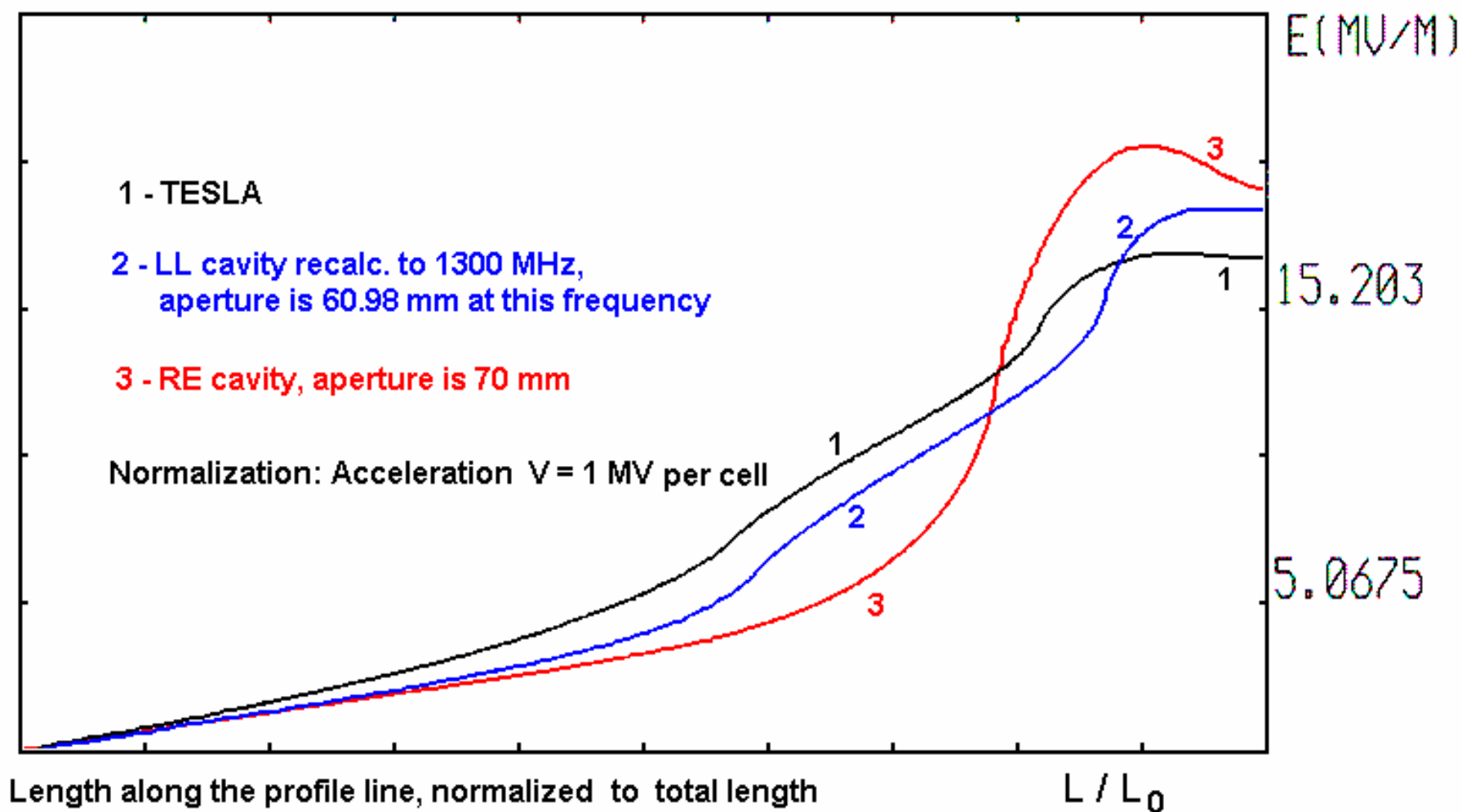


# Shape and Preparation

- Aperture of re-entrant cavity reduced from 70 mm (Tesla-shape) to 60 mm (like LL shape) to reduce  $H_{pk}/E_{acc}$  for RE cavity from 38 to 35 Oe/MV/m
- Cavity fabricated and post purified ( $RRR > 600$ ) at Cornell, sent to KEK
- Centrifugal Barrel Polishing and Horizontal EP at KEK, HPR
  - Tests at KEK limited by field emission to 45 MV/m, due to water quality at Nomura Plating.
- Return to Cornell
- HPR 2 hours and test





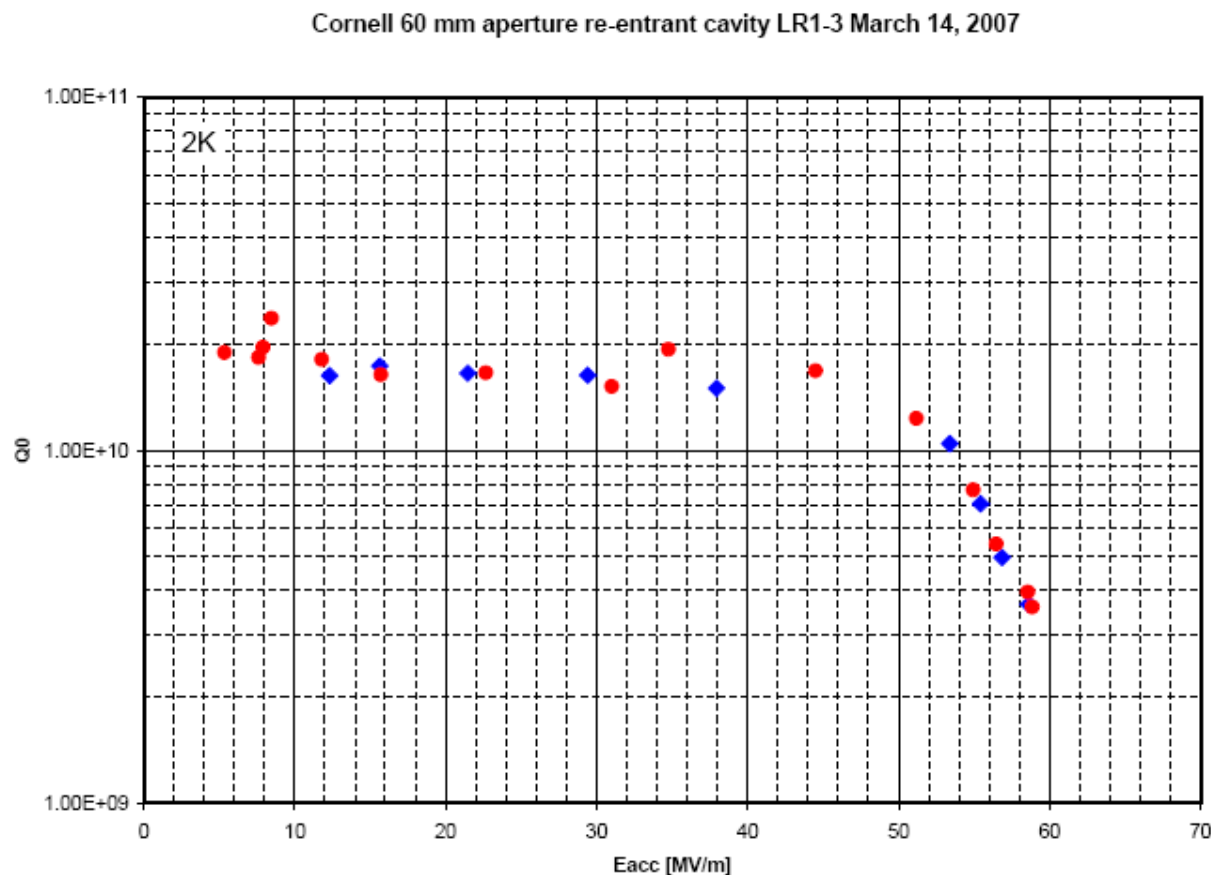


# 60mm-Aperture Re-Entrant Cavity, 58 MV/m!

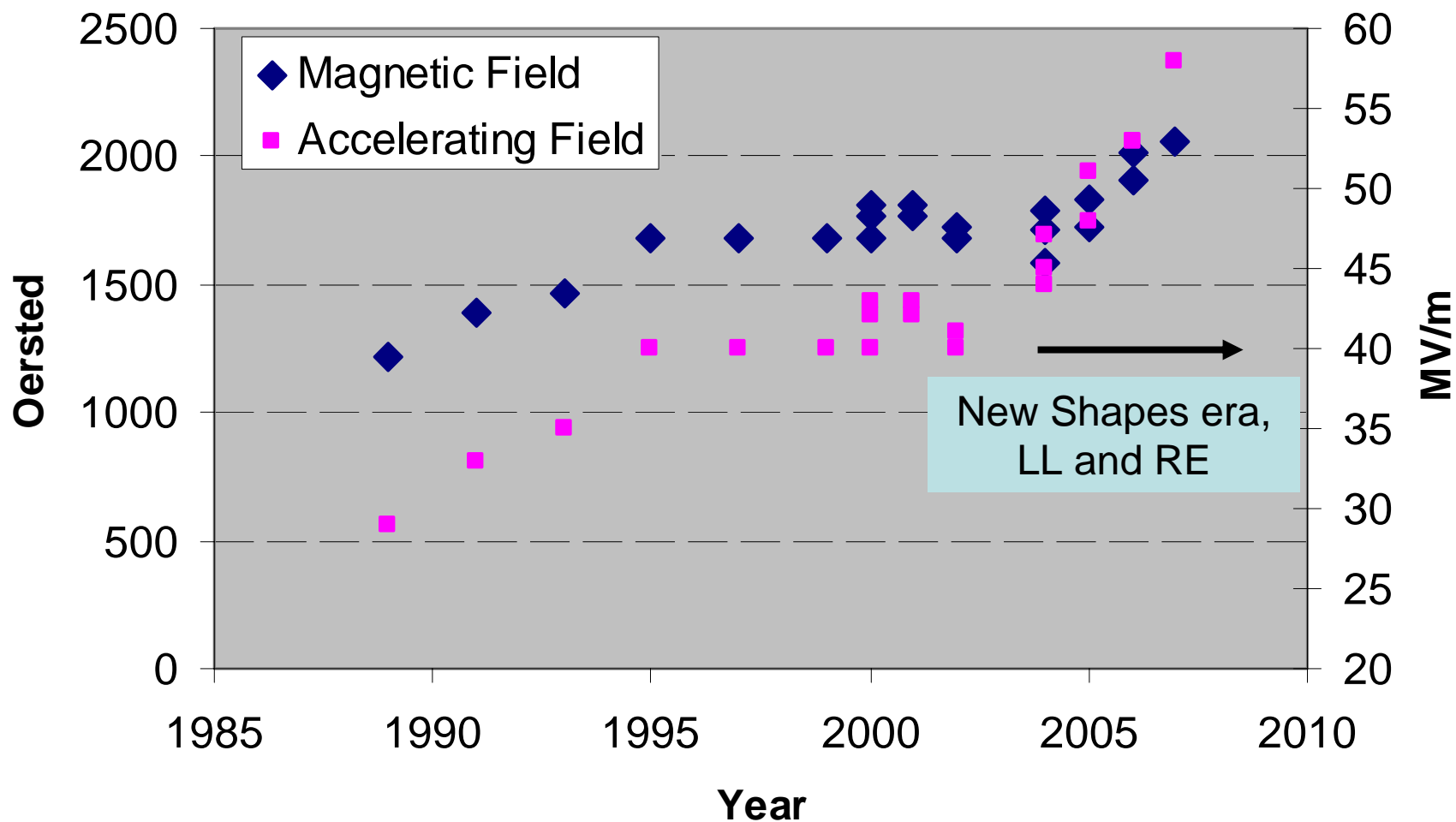
## KEK/Cornell Collaboration



RE-LR1-3



# Evolution of Accelerating and Surface Magnetic Fields



# Compare to Theories for RF Critical Field

