



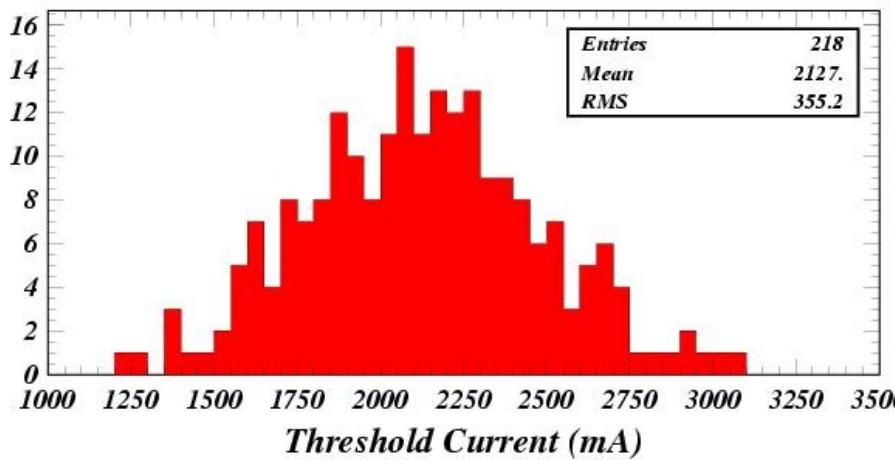
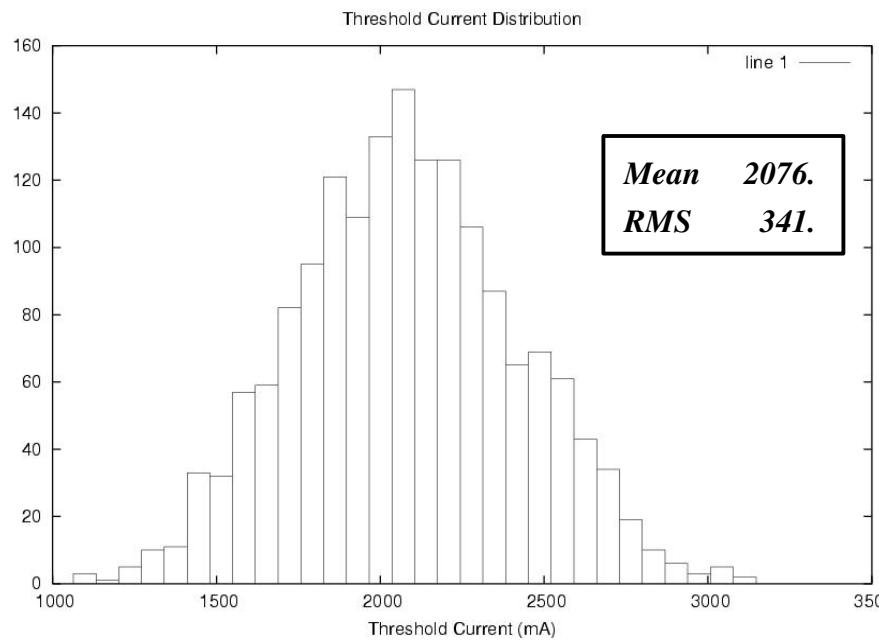
# *BMAD Beam-Breakup Calculation Update*

*Jim Crittenden  
ERL @ CESR Meeting  
23 July 2009*

## *I. Statistical Comparison to ERL-06-01*

## *II. Info on critical HOM/cavity for CM's Minimum ERL*

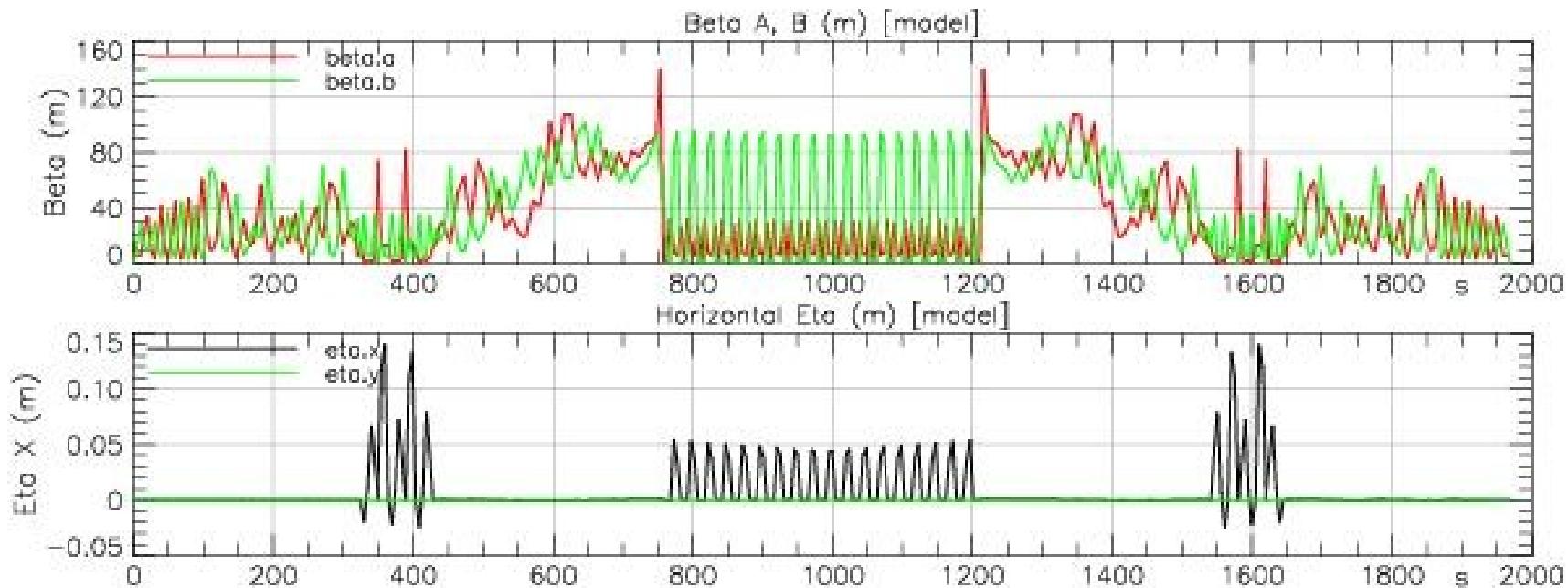




*The BMAD BBU threshold calculation*

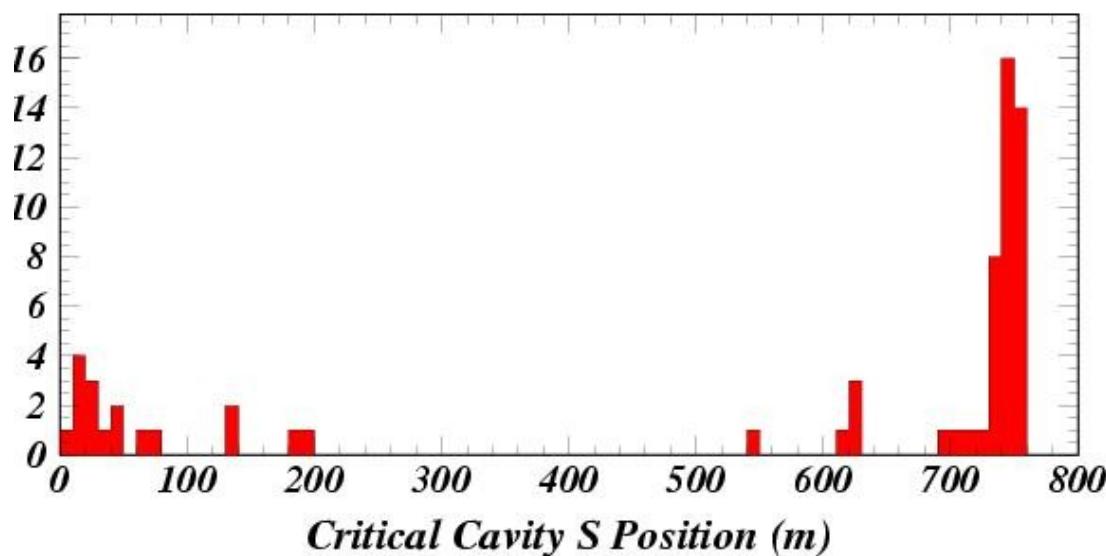
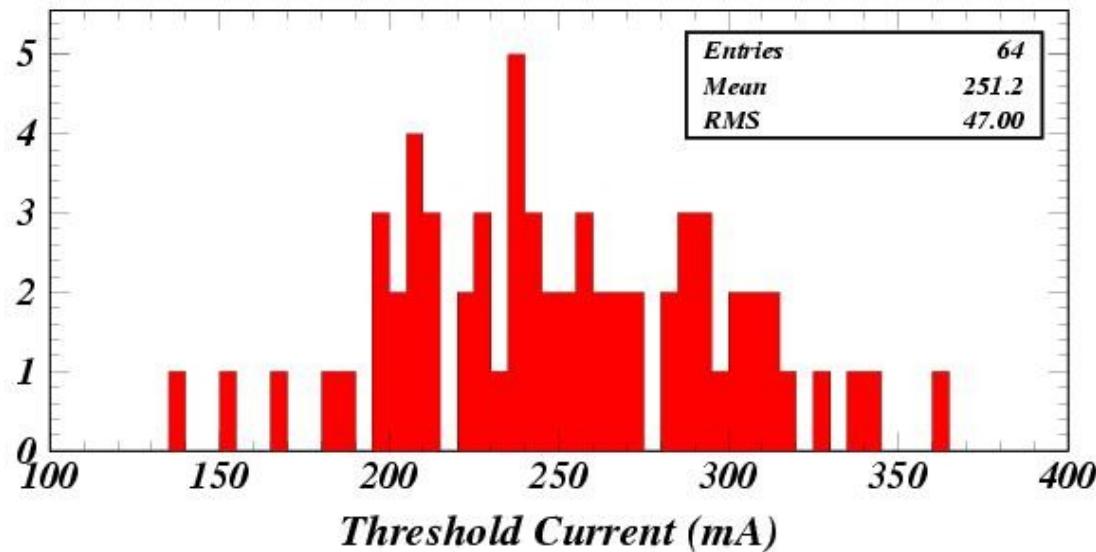
*reproduces both the average value*

*and spread of the ERL-06-01 calculations*



*Optimized symmetric linacs*

*Useful for studying BBU optimization methods*



*Threshold currents similar to CERL 7.4*

*Critical cavity most often at high-energy end of first linac*