

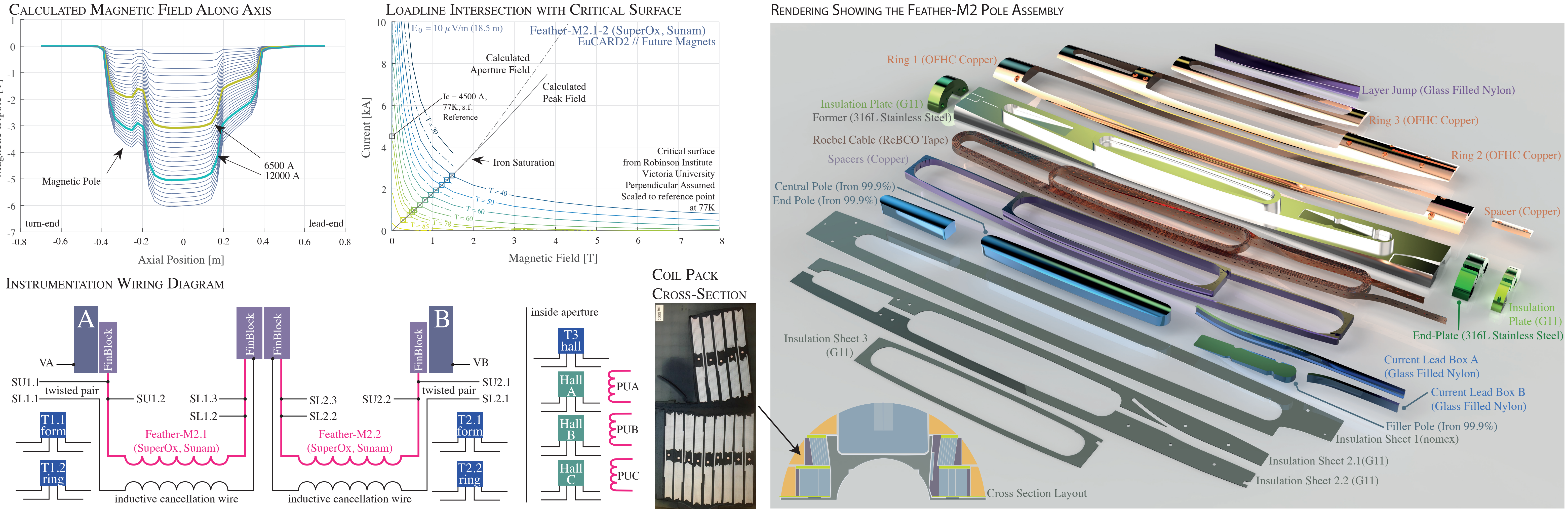


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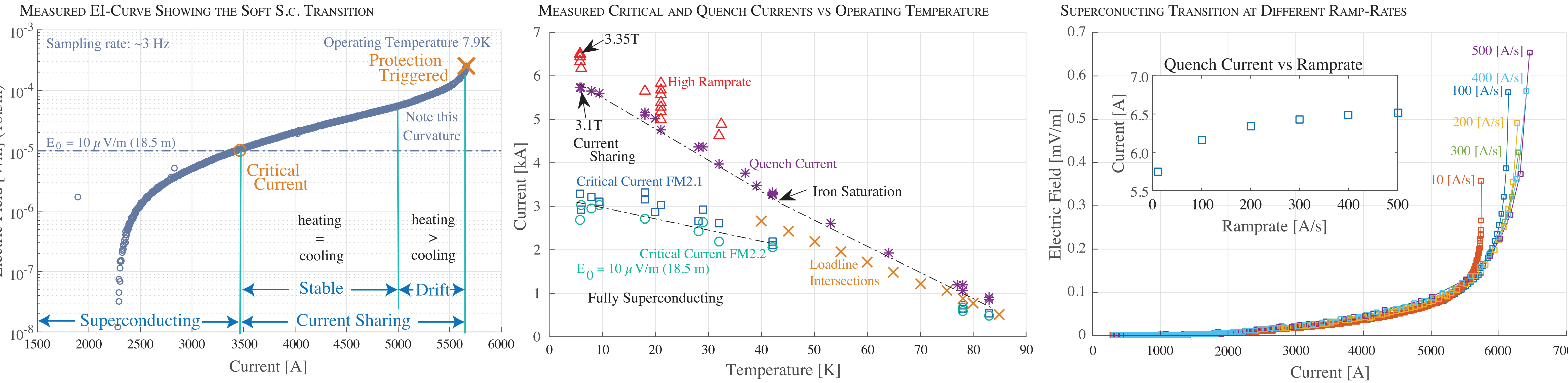
# POWERING OF AN HTS DIPOLE INSERT-MAGNET OPERATED STANDALONE IN HELIUM GAS BETWEEN 5 AND 85 K

J. van Nugteren, G. Kirby, H. Bajas, M. Bajko, A. Ballarino, L. Bottura, A. Chiuchiolo, P-A. Contat, M. Dhalles, M. Durante, P. Fazilleau, A. Fontalva, P. Gao, W. Goldacker, H. ten Kate, A. Kario, V. Lahtinen, C. Lorin, A. Markelov, J. Mazet, A. Molodyk, J. Murtomäki, N. Long, J. Perez, C. Petrone, F-O. Pincot, G. de Rijk, L. Rossi, S. Russenschuck, J. Ruuskanen, K. Schmitz, A. Stenvall, G. Willering and Y. Yang

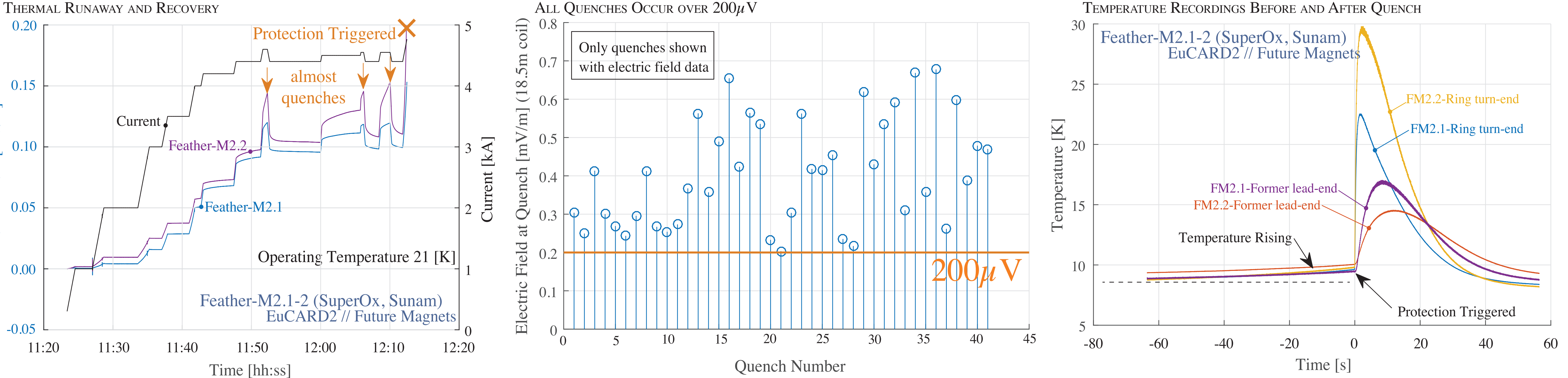
## I. THIS POSTER PRESENTS THE COLD TESTING RESULTS OF THE HIGH TEMPERATURE SUPERCONDUCTING MAGNET FEATHER-M2.1-2.



## II. A FACTOR 1.5, DIFFERENCE WAS FOUND BETWEEN THE FITTED CRITICAL CURRENT AND THE QUENCH CURRENT. BETWEEN THESE TWO VALUES A CURRENT SHARING REGIME IS PRESENT IN WHICH THE MAGNET IS PARTIALLY RESISTIVE, RESULTING IN HEATING. THIS CURRENT SHARING REGIME CAN BE SUBDIVIDED FURTHER IN A STABLE ZONE AND A DRIFT ZONE.



## III. DETECTING THE ONSET OF A QUENCH IS POSSIBLE TENS OF SECONDS TO MINUTES AHEAD OF TIME, REDUCTION OF CURRENT RESULTS IN IMMEDIATE RECOVERY.



## IV. N-VALUE, TRIPLE-R AND JOINT RESISTANCES WERE DETERMINED

