

## HIGH-MAGNETIC-FIELD LIMIT TEST OF THE TOULOUSE 80 TESLA MAGNET

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### Experimental

In a cooperative agreement with LNCMP at Toulouse France we used our 100Tesla capacitor bank system to pulse a new magnet designed and constructed by Paul Fringes.

The magnet was pulsed at successively higher currents until we induced stress failure. The maximum field that the magnet obtained before failure was 80 tesla at a current in the vicinity of 45 kA. The unique feature of this magnet was the use of stainless steel clad wire. Current and field profiles were provided to the experimenter for each of the pulses.

The experimental duration was 4 days and the testing program was considered to be a success.