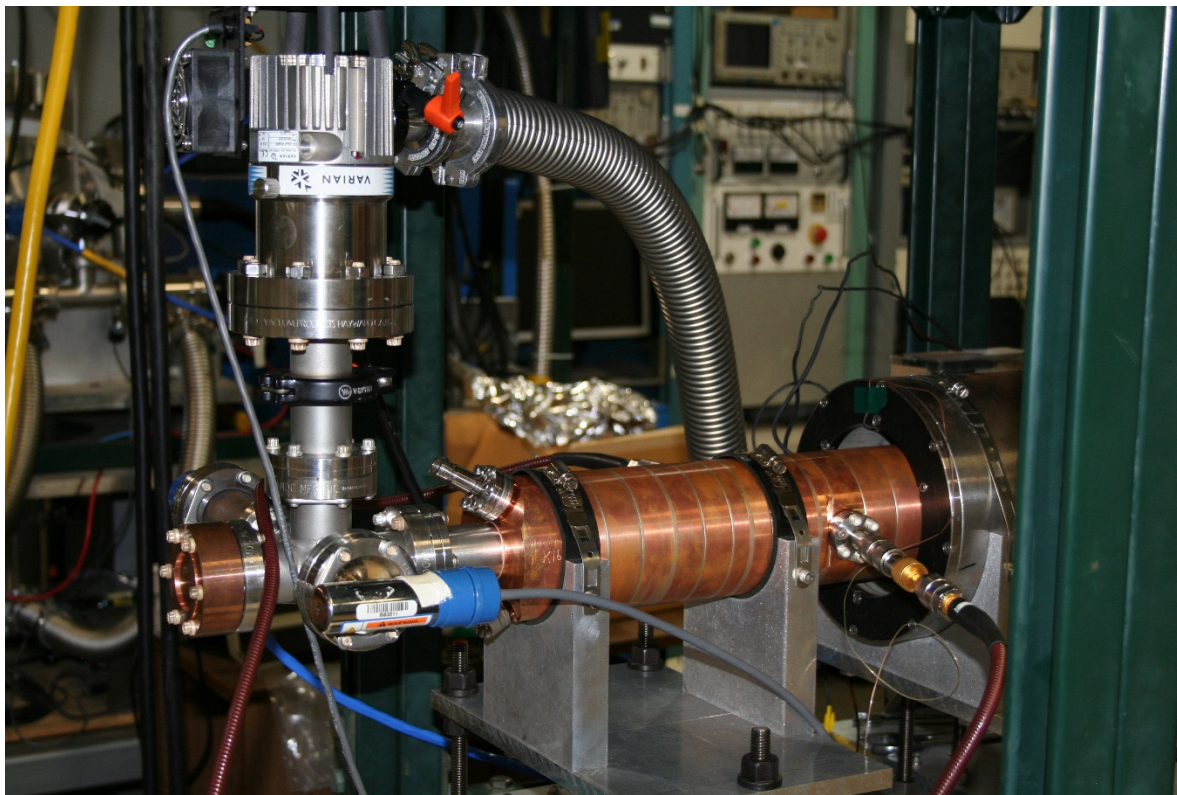


Klynac Design Simulations and Experimental Setup Description

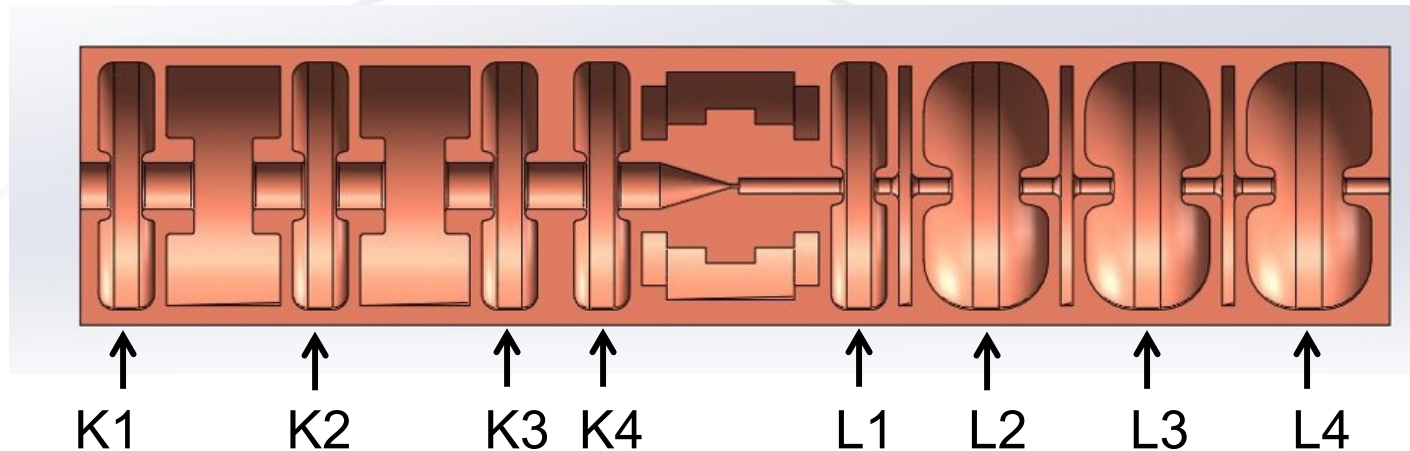
Kimberley E. Nichols, Bruce E. Carlsten, Jim Potter,[†]
Alexander Malyzhenkov

Los Alamos National Laboratory, [†]JP Accelerator Works

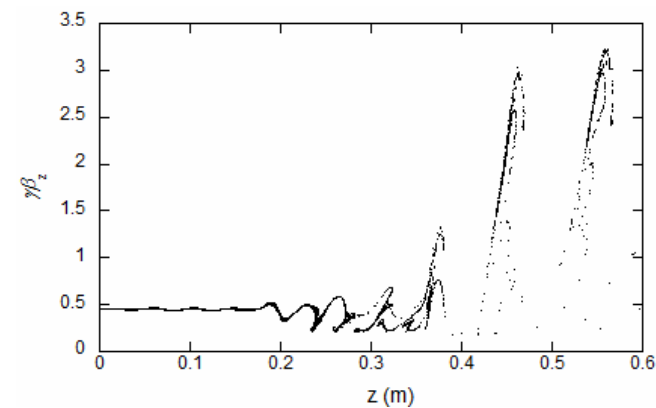


**Novel Compact
Accelerator
combined RF
source Design**

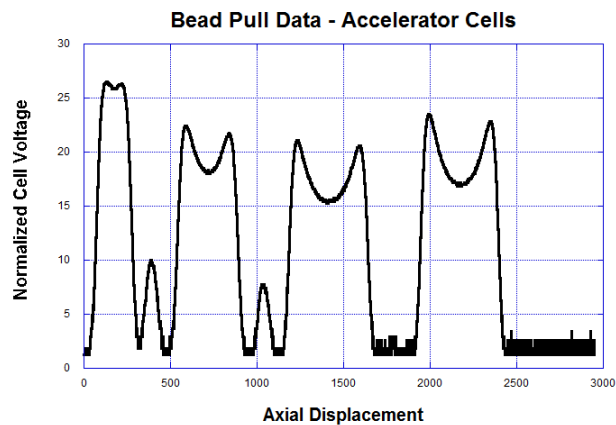
Klynac Concept



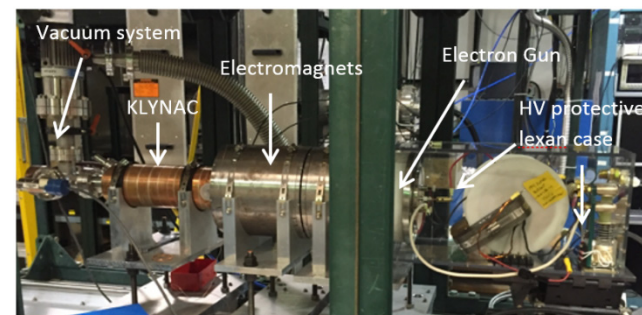
Simulation



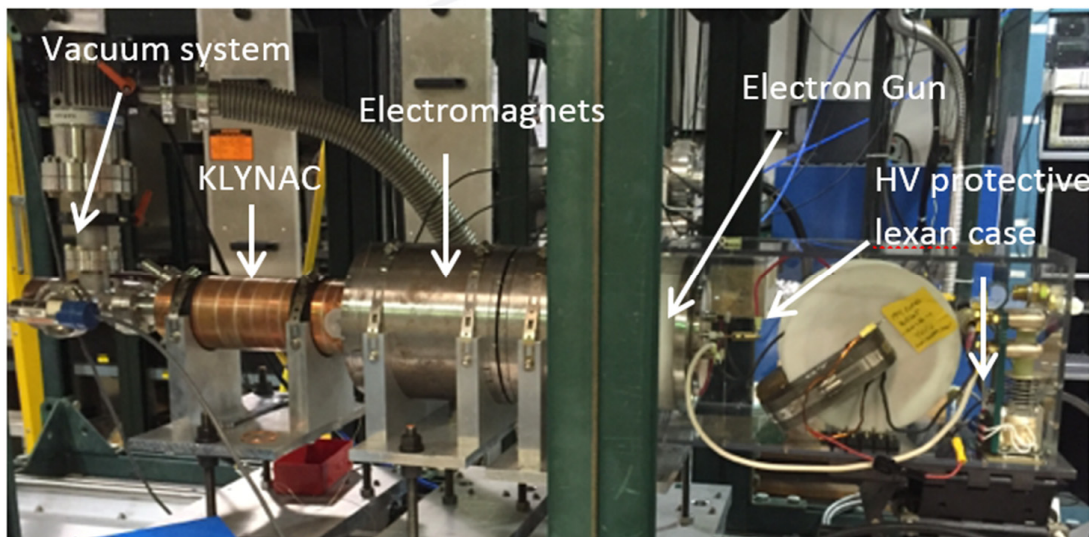
Cold Tests



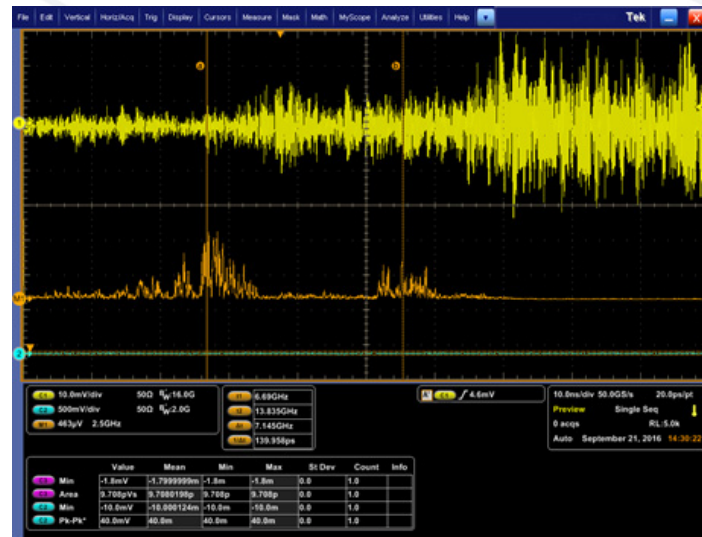
Hot Tests



Experimental Setup



8-cell KLYNAC undergoing tests at LANL. The 50-kV, 10-A electron gun is about 20-cm long and the KLYNAC structure is about 60-cm long. A solid-state, diode-directed MARX pulser is used to drive the electron gun. A copper beam stop is used as an x-ray converter and the photons are samples with a scintillator and multichannel analyzer.



Preliminary RF build-up results at 45 kV – 80 mW at 20 dB down, primarily at 6.7 GHz – π mode.