

Possible ANL Contribution

Ali Nassiri - ANL



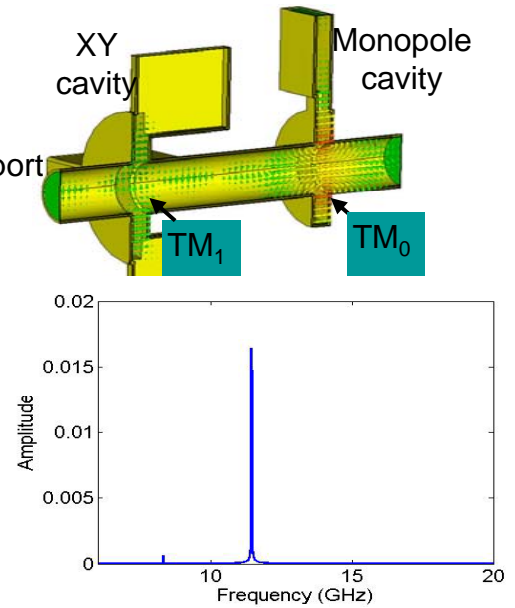
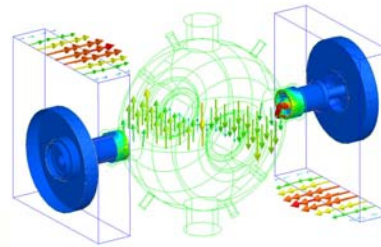
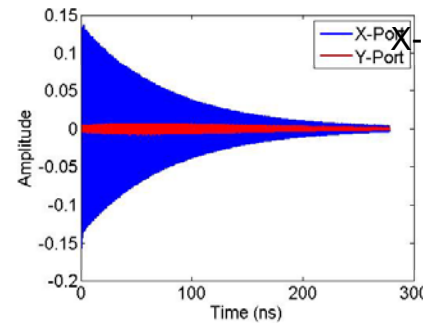
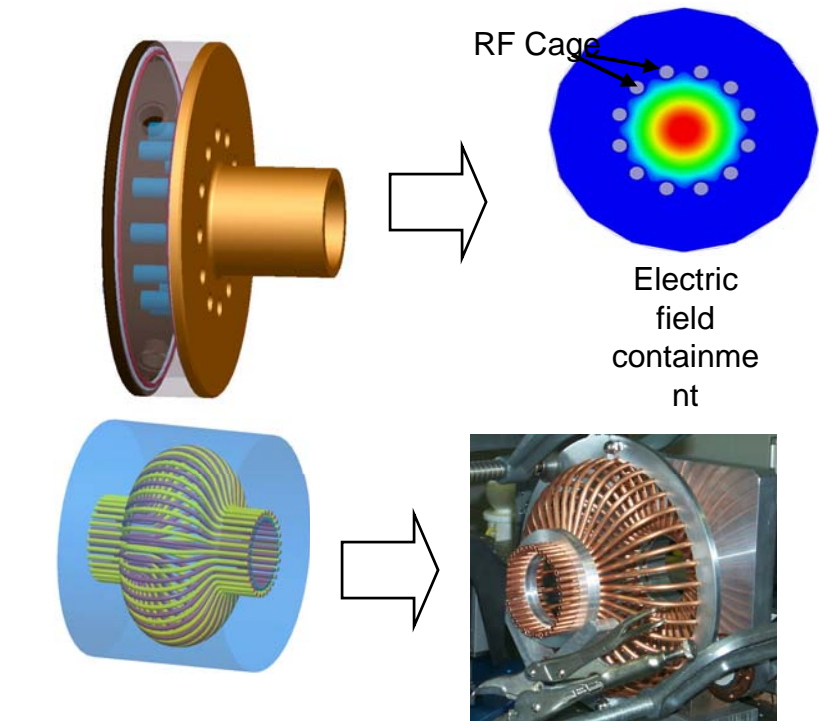
- Beam Dynamics
- RF and thermal modeling and analysis
- SRF Facility
- Injector Test Stand
- RF Test Stand
 - 352 MHz CW (autonomous)
 - 2856 MHz Pulsed (autonomous)

Beam Physics

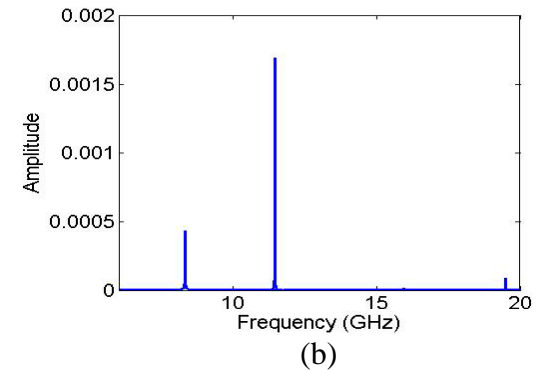
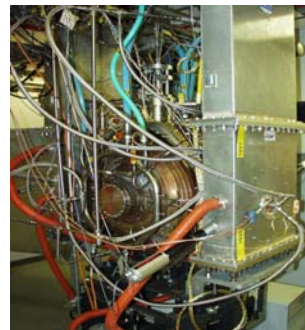
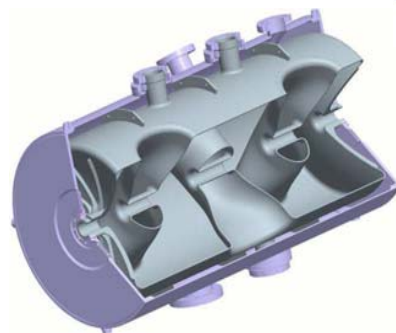
■ Advanced Simulation and modeling

- Customized lattice design
- BBU
- Space charge effects
- CB and MB instabilities
- Laser-plasma simulations
- CSR
- Wakefields
- Collective effects
- Electron cloud effect
- Laser methods in accelerators
- Radiation modeling for shielding

RF Structures Simulation and Design



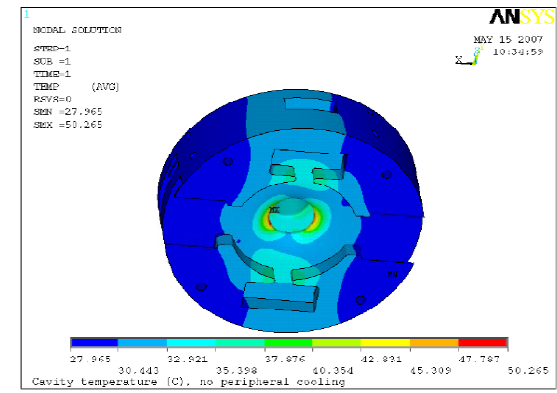
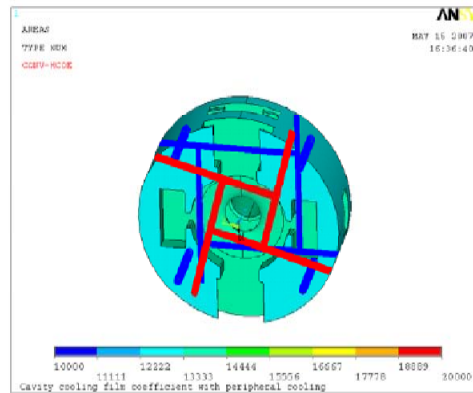
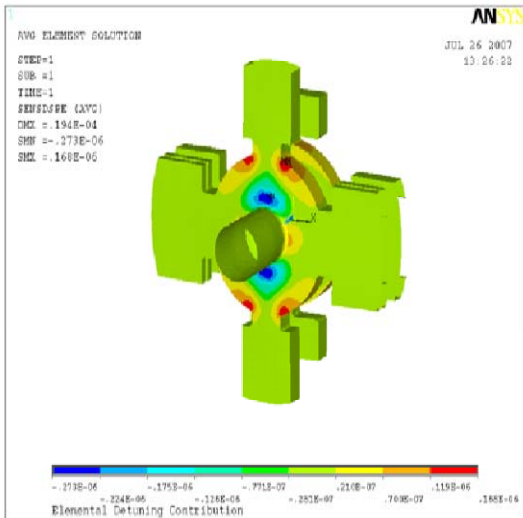
Time-domain (a) output signal from the X-port and Y-port



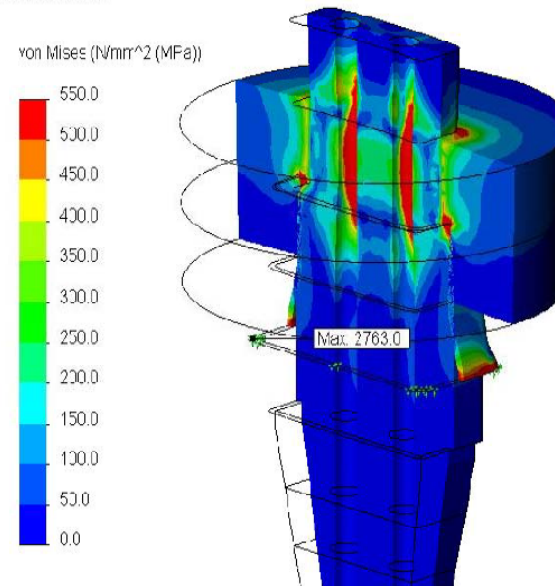
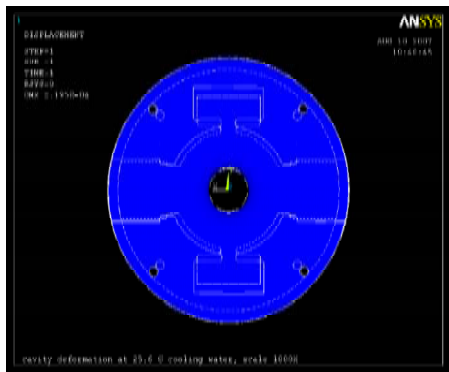
Frequency spectrum of the output signal of the XY cavity at the (a) X-port and (b) Y-port

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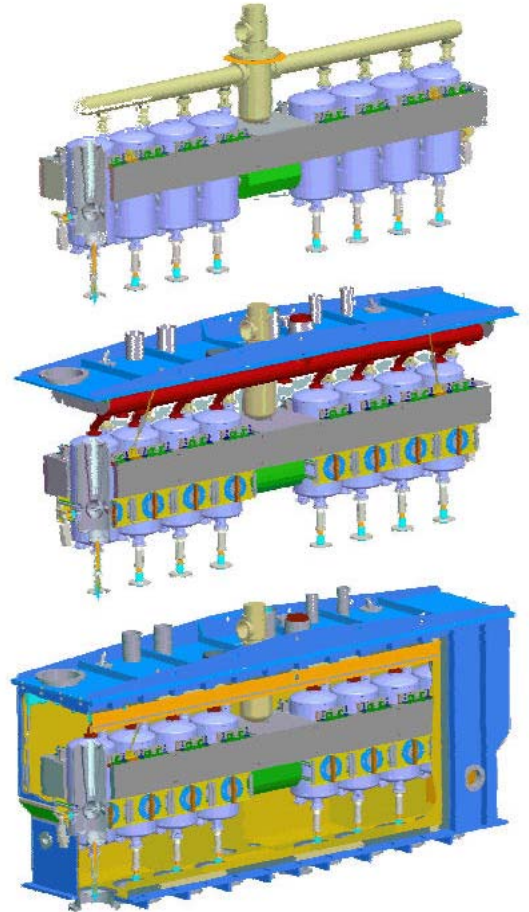
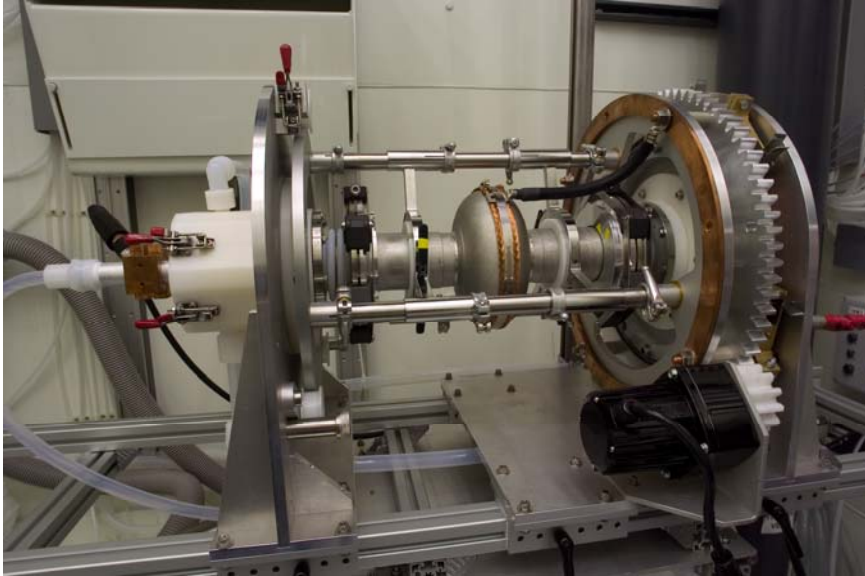
Thermal Analysis



Model name: Complete small damper w SiC neck Water Cooled
 Study name: Study 3
 Plot type: Static nodal stress Stress1
 Deformation scale: 50



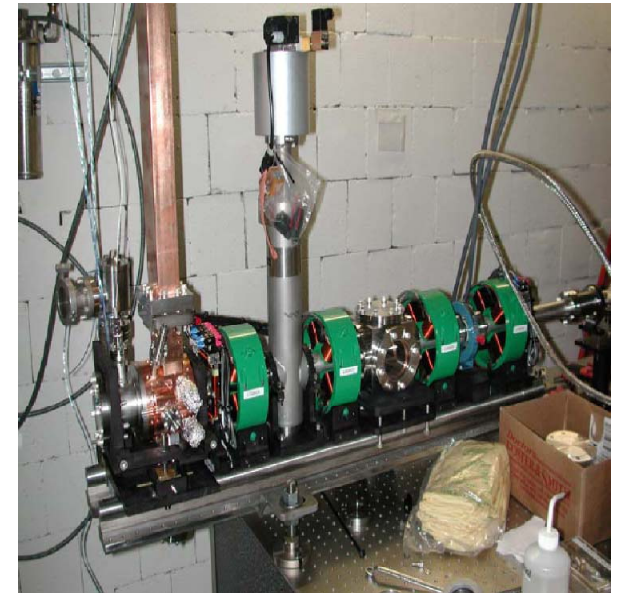
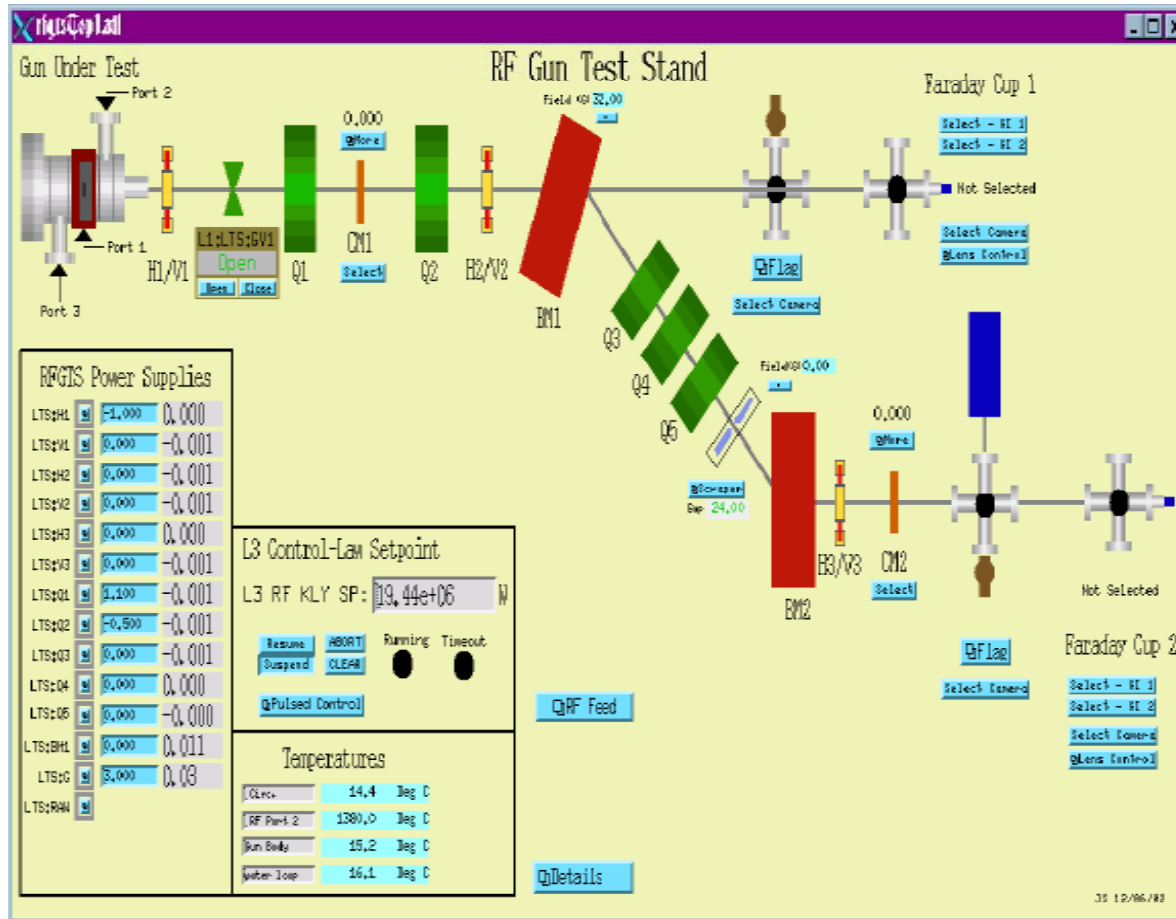
SRF Facility



February 26, 2008

Injector Test Stand

New Linac Injector Guns



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352 MHz Test Stand



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