

Cavity Database

- Presently are constructing Magnet Databases (BNL)
 - magnet field property , field quality measurement data, alignment measurements data, quality assurance checklists, and installation information
- Need data storage for superconducting cavities
 - Q vs. accelerating field
 - Lorentz coefficient
 - ...
- Decide on table structure

Cavity Test Facility Shielding

- A-E needs cavity test cave shielding thickness.
- Used simple scalings of measured radiation levels from existing facilities.
- Will look into using shield blocks.

<u>Facility</u>	<u>Shield</u>	<u>Peak Surface Field (MV/m)</u>	<u>Gap voltage (MV)</u>	<u>Measured radiation^(c) (mR/hr)</u>
<i><u>DTL Cavities</u></i>				
FNL	??	14	1	1000 (initial – worst case)
LANL	Movable lead panels (1/4 in Al, 1/8 in Pb, 1/4 in Al)	~25		~ 60 ^(e)
<i><u>Superconducting Cavities</u></i>				
Cornell	2 feet heavy concrete ^(a)	17	2	500 - after conditioning
JLab, cryo-facility	4.5 ft. concrete walls, 3 ft. concrete ceiling ^(b)	35 ^(d)	7 ^(d)	