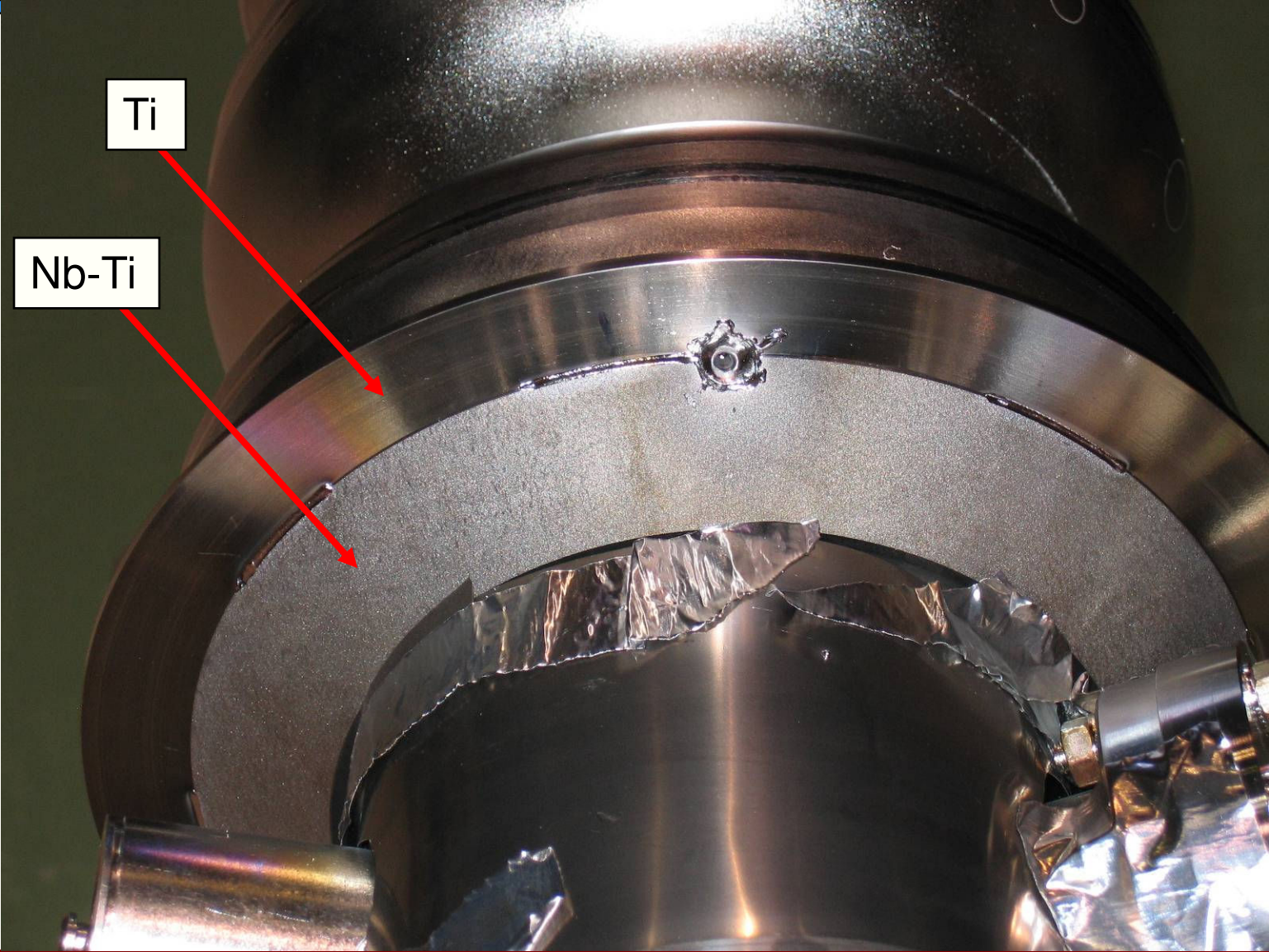


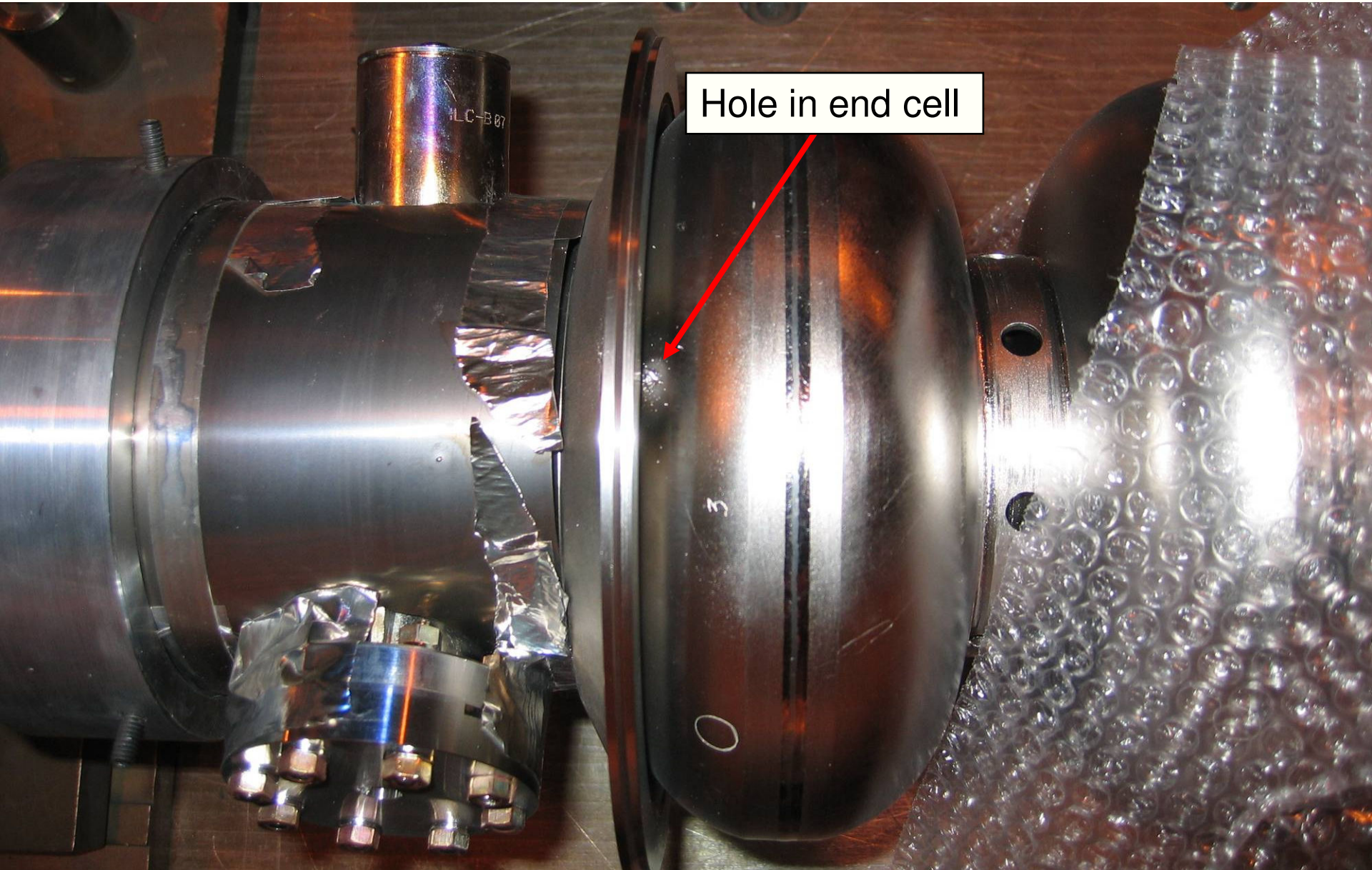
Update on S0 Work in the Americas Region

Mark Champion

14 July 2009

- **Helium vessels have been successfully installed on two cavities: AES001 and AES004**
 - **No perturbation to field flatness on either cavity; extensive monitoring throughout the process.**
 - **AES001 awaits final high-pressure rinse and assembly at Argonne and then will proceed to horizontal test at Fermilab**
 - **AES004 to follow**
- **Titanium transition rings have been attached to the niobium-titanium end dishes via electron beam welding at Sciaky**
 - **Completely successful on AES001 and AES004**
 - **Failure occurred during welding on Acc012, which resulted in a hole in the end cell of the cavity**
 - **After repairs to the electron beam welder, we will proceed with Acc011 and Acc013.**
 - **New batch of Accel (RI) cavities will be returned to vendor for installation of titanium rings**





Hole in end cell

- **VTS2-3 civil construction planned for this summer**
 - Pending contract finalization, 2 month shutdown will begin in August
- **Problems with high-pressure rinsing system at Argonne have stopped cavity processing for several weeks**
 - To be described in following talk by Charlie Cooper
 - Single-cell cavity has been rinsed and will be tested this week to qualify repairs
 - If cavity performance is good, we will proceed with nine-cell cavity AES001
 - Longer term improvements are in progress



Slide from Zack Conway

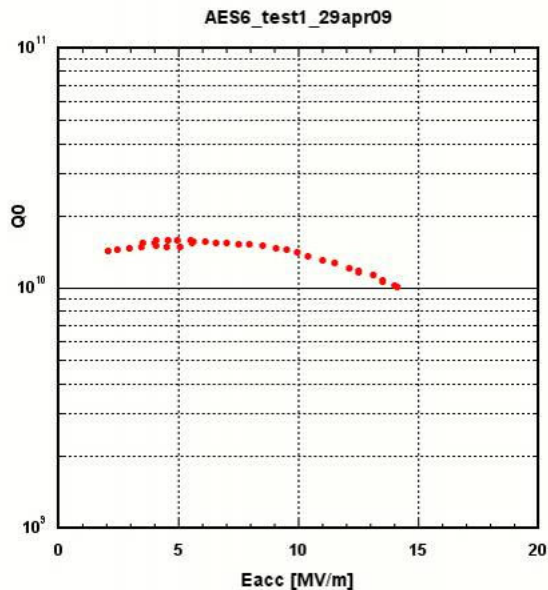
- 9-Cell Testing
 - Preparing to test TB9ACCC010
 - VEP on or around July 30-31
 - Test 1- 2 weeks later
 - Cavities in various state of repair/preparation:
 - ACCEL-9
 - TB9AES005
 - LR9-1
- We have performed 6 single cell tests in the past 2 months to improve the VEP, tumbling, and high vacuum baking at Cornell.

JLab slides for the 13th ILC cavity group meeting

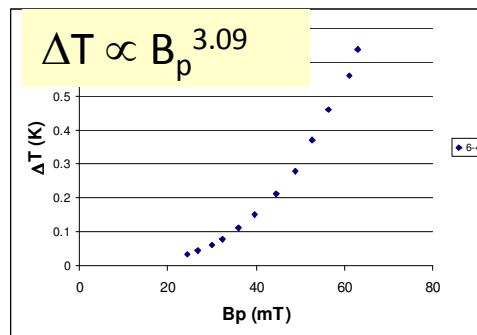
Rongli Geng July 13, 2009

- AES6 first-pass processing and testing including T-mapping and optical inspection
- AES9 bulk EP, hydrogen out-gassing at 800CX2hr (H out-gassing also for softening)
- Light EP LG1 (JLab large-grain 9-cell)

New quench limited 9-cell cavities studied by T-mapping and optical inspection – 2/2



First pass RF test: 14 MV/m limited by hard quench in cell 5.
Only one spot in cell 5. All other cells reached 32-44 MV/m.



Strong precursor heating

Twin defects, 300um and 500um
8mm from equator weld seam

