

# **ACCELERATOR SEMINAR**

## **RF Operational Experience with High QL SRF Cavities**

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Jlab is currently commissioning ten new C100 cryomodules, a major part of the 12 GeV Energy Upgrade Project. For each of eighty cavities, a new LLRF system has been installed and now is undergoing rigorous tests. The CEBAF 12 GeV energy upgrade cavities have a QL of  $3 \times 10^7$  and operate at gradients of 20 MV/m. Operation of these cavities is challenging due to their microphonic sensitivity, cavity to cavity mechanical coupling and Lorentz force detuning. In this presentation we will discuss these issues. Possible improvements and future design concepts will be addressed in conclusion.

**Thursday, October 31, 2013  
11:00 a.m.  
CEBAF Center, Room F113**