**On-line Performance of the LNL Mechanically Damped Superconducting Low Beta Resonators**, <u>A. FACCO</u>, V. ZVIAGINTSEV, INFN-LNL - A new device for elimination of mechanical modes, which allows to use high performance superconducting cavities in accelerator environment in the absence of electronic fast tuners (considered, until now, indispensable for superconducting cavities working below 100 MHz even if they were often limiting the resonator performance during operation) was developed at LNL. The new technique, consisting of mechanical dissipators inserted in the resonators, can eliminate one of the main problems affecting low frequency superconducting cavities, improving significantly their characteristics in terms of operation field level, reliability and cost. Mechanical dissipators will be installed in the LNL, 80 MHz superconducting low beta resonators of the linac ALPI; test results and on-line performance will be presented.