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First results from two Nb3Sn cavities assembled in a CEBAF quarter cryomodule

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Two 1.5 GHz CEBAF C75-shape 5-cell accelerator cavities were coated with Nb3Sn film using the vapor diffusion technique at Fermilab and Jefferson Lab coating facilities. Both cavities were measured at 4 K and 2 K in the vertical dewar test in each lab, then assembled into a CEBAF quarter cryomodule at Jefferson Lab. The cryomodule was tested in 4 K and 2 K in the CryoModule Test Facility at Jefferson Lab. RF test results for both cavities in the cryomodule are similar to those of the qualification test in VTS, with one cavity reaching Eacc = 7.5 MV/m and the other - 13 MV/m at 4 K. In this contribution we discuss the progress with assembling Nb3Sn cavities in a cryomodule and the first results from cryomodule testing.

Footnotes

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