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First results of AUP Nb3Sn quadrupole horizontal tests

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The Large Hadron Collider will soon undergo an upgrade to increase its luminosity by a factor of ~10. A crucial part of this upgrade will be replacement of the NbTi final focus magnets with Nb3Sn magnets that achieve a ~50% increase in the field strength. This will be the first ever large scale implementation of Nb3Sn magnets in a particle accelerator. This talk will present the program to fabricate these components and first results from horizontal tests of fully assembled cryoassemblies.

Footnotes

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Paper preparation format

Region represented

North America

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Magnets