



Contribution ID: 1065 Contribution code: WED-SS-02

Type: **Invited Oral**

[Invited] Lessons Learned in the Development of Accelerator Magnets based on Nb₃Sn and HTS

Wednesday 17 November 2021 18:50 (20 minutes)

Superconducting accelerator magnets, due to their high aspect ratio and field configurations, have some unique design and fabrication issues, particularly for higher magnetic field configurations. After more than a half century, the accelerator magnet community is, for the first time, now on the verge of installing magnets based on Nb₃Sn in the Large Hadron Collider at CERN. Much experience has been gained over the past several decades, but there is more to be done. High Temperature Superconductors (HTS) are relatively new in terms of their application in accelerator magnet configurations. Though very promising in terms of field performance, there are many issues to be resolved before seeing practical use. This talk will highlight some of the lessons learned in the development of accelerator magnets based on both Nb₃Sn and HTS as well as some of the remaining challenges.

Primary author: GOURLAY, Stephen (LBNL)

Presenter: GOURLAY, Stephen (LBNL)

Session Classification: WED-SS Special Session "Lesson learned"