Pushing the Limits of RF Superconductivity Workshop

Abstract Submission Form for Contributed Talks

Name: GENFA WU

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Session: (choose one)

_X_ Ultimate Field Limits, New Materials, New Geometries

___ High Q, Field Emission, Q-Slopes

___ Future Research Paths to Ultimate Performance

ABSTRACT

Title: Thin Film Coatings for RF Superconductivity

Niobium on copper technology has been a viable and attractive technology other than the solid niobium in RF superconductivity. It becomes a must have technology for some applications. Interests are growing to dramatically improve the performance of the niobium thin film cavities. Different coating processes are considered and developed around the world. The latest status and results for these different coating processes will be presented. New materials like Nb_3Sn and MgB_2 for these coating processes and alternative coating technology will also be discussed.