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1:30 PM, ORANGE ROOM
CENTRAL LAB

TECHNIQUES IN FABRICATION of Flexible Circuits



GUEST SPEAKER –
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EXO-200 is an ultra-low background double beta decay experiment. It's main physics goal is the search for neutrino-less double beta decay of ^{136}Xe . The EXO-200 inner detector assembly is currently ongoing on the Stanford campus, and will be installed and run underground at the WIPP salt mine in New Mexico next year. One of it's toughest challenges is to reach low enough radioactive background in its constituents to allow for the observation of such extremely rare events with good sensitivity. This talk focuses on the technical aspects of the custom-made flat cables, designed and produced with the strictest radioactivity budget possible. I will illustrate the design arguments for such cables, the material selection process and qualification, the production campaign and technology, and show pictures of the assembly and installation process.

