

Development of Suitable Dielectrics for the High Luminosity LHC

Saturday, 1 December 2018 10:15 (10 minutes)

The tracking detectors at the High Luminosity Large Hadron Collider will require a dielectric capable of withstanding the high voltage that will be applied across their silicon sensors to maintain efficiency. Dielectrics are currently being studied using experimental device configurations which are electrostatically analogous to the LHC trackers to determine the most effective material to prevent this breakdown. Factors that influence breakdown such as time, air gaps, ambient temperature, and processing variables are being investigated as the second phase to this project to characterize our dielectrics. This talk will present the various experimental configurations and the results of these tests.

Session

Lightning Round (5+3 min)

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Session Classification: Lightning Talks