

Abstract Submitted
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Measurement and control of electrostatic patch potentials

JOSEPH L GARRETT, JEREMY N MUNDAY, University of Maryland, College Park — Electrostatic patch potentials hinder many precision measurements, particularly measurements of the Casimir force. Despite the improved force sensitivity achieved over the last decade, only recently have attempts been made to measure and quantify the effects of patch potentials. Here we present an analysis of patch potentials measured by Kelvin probe force microscopy (KPFM) and discuss methods to control these potentials (e.g. humidity, material choice, etc).

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