VOLTAGE CONTROLLED GEOMETRIC PHASE ROTATION IN ^{208}Pb^{19}F.

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Many theoretical publications have investigated the impact of the geometric phase on measurements of the e-EDM. However, there has been surprisingly little quantitative comparison of these models with experiment. Here we create a quantum beat experiment that starts with an optical pump and ends with an optical probe of ^{208}Pb^{19}F. This measurement includes the ability to control a geometric phase variation of the molecular alignment by applying an appropriate bias voltage. These experiments will then used to test the accuracy of our model calculations of geometric phase rotation.