

Multiple-equilibria Traps for Charged and Neutral Dielectrics

Stephen Minter
Graduate Student
Applied Mathematics
School of Natural Sciences
University of California, Merced

Many existing particle traps have one point of stable equilibrium. Experimental research in gravitational radiation being conducted at UC Merced requires a trap with two points of stable equilibria. Previous design attempts will be explained, as well as a current design closely related to the AC Paul trap, with the goal of creating a trap with multiple points of stable equilibria.