

Ab initio calculation of electric-field gradients: past, present and future

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Calculating electric-field gradients from first principles has established a firm place in the research field of hyperfine interactions. In this talk, I will analyze how this has changed the way in which scientists use quadrupole interaction information. And I will argue that this is only the beginning: with fast and easy access to calculated field gradients, other ways of performing quadrupole interaction experiments will become possible.