

The correct calculus rules for Clifford analysis on super-space

by

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A radial algebra starts with a set S of so called “abstract vector variables” together with the relations $z(xy + yx) = (xy + yx)z, x, y, z \in S$ leading to an associative algebra. Abstract Dirac operators may be defined as endomorphisms on this algebra and it is possible to develop a kind of abstract Clifford analysis to some extent. Standard Clifford analysis may be seen as a representation of this but in former work we also illustrated that a form of Clifford analysis on super-space, using commuting and anti-commuting variables is in fact fully determined by the laws of radial algebra by requiring it to be a representation. In our presentation we give an overview of all the rules of calculus that appear in this analysis.