

The Hermitian Clifford Analysis Toolbox

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Abstract. Hermitian Clifford analysis focusses on monogenic functions taking values in a complex Clifford algebra or in a complex spinor space. Here monogenicity is expressed by means of two complex mutually adjoint Dirac operators, which are invariant under the action of a representation of the unitary group. In this paper we have properly developed the Hermitian Clifford analysis framework and established a Hermitian Fischer decomposition, which, as is the case in traditional Clifford analysis, is a corner stone of the function theory.

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