Complex and Hypercomplex Analysis

SEMINAR

on

COMPLEX AND HYPERCOMPLEX ANALYSIS

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Analysis on Clifford-Kanzaki algebras

Heikki Orelma
Tampere University

Clifford-Kanzaki algebras $\mathcal{C}_n(\underline{a})$ are generalized Clifford algebras defined as follows: Let $\underline{a} \in \mathbb{R}^n$ be a vector. If $\{e_1, ..., e_n\}$ is an orthonormal basis, the multiplication is defined by relations

$$e_j^2 = a_j e_j - 1,$$
$$e_i e_j + e_j e_i = a_i e_j + a_j e_i,$$

for $a_j = e_j \cdot \underline{a}$. The case $\underline{a} = \underline{0}$ corresponds to the classical Clifford algebra $\mathbb{R}_{0,n}$. In the talk, we consider analysis for functions $f : \Omega \to \mathcal{C}_n(\underline{a})$ where $\Omega \subset \mathbb{R}^n$.

References

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