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	Nota di contenuto	Models and representations of classical groups -- Clifford algebras, chain geometries over Clifford algebras -- Kinematic mappings for Pin and Spin groups -- Cayley-Klein geometries.
	Sommario/riassunto	After revising known representations of the group of Euclidean displacements Daniel Klawitter gives a comprehensive introduction into Clifford algebras. The Clifford algebra calculus is used to construct new models that allow descriptions of the group of projective transformations and inversions with respect to hyperquadrics. Afterwards, chain geometries over Clifford algebras and their subchain geometries are examined. The author applies this theory and the developed methods to the homogeneous Clifford algebra model corresponding to Euclidean geometry. Moreover, kinematic mappings for special Cayley-Klein geometries are developed. These mappings allow a description of existing kinematic mappings in a unifying framework. Contents Models and representations of classical groups

Clifford algebras, chain geometries over Clifford algebras Kinematic mappings for Pin and Spin groups Cayley-Klein geometries Target Groups Researchers and students in the field of mathematics, physics, and mechanical engineering About the Author Daniel Klawitter is a scientific assistant at the Institute of Geometry at the Technical University of Dresden, Germany. .