

# PEANO READER OF H. GRAßMANN'S *AUSDEHNUNGSLEHRE*

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In this talk I propose an analysis of Peano's studies about the geometric calculus. In the volume of 1888 (*Geometric Calculus according to H. Grassmann's Ausdehnungslehre preceded by the operations of deductive logic*), Peano presents Grassmann's ideas (*Ausdehnungslehre*, 1844) in an original way: he gives an Euclidean interpretation to the fundamental Grassmannian notions. Hence by means of his geometric calculus, Peano is able to show theorems of projective geometry. Therefore, Peano's geometrical calculus (which has an intrinsic mathematical interest in order to the applications to the geometry and to the mechanics) has an implicit foundational role. The disciple of Peano who devoted himself above all to the studies of geometric calculus was Cesare Burali Forti (1861-1931); but also Filiberto Castellano (1860-1919), Tommaso Boggio (1877 - 1963) and Mario Pieri (1860-1904) took an interest in the subject.