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On minimal surfaces in Finsler spaces

(joint work with P. Overath)

In contrast to classic minimal surface theory relatively little seems to be known about minimal surfaces in Finsler manifolds. We explore a connection between the Busemann-Hausdorff volume in Finsler spaces and Cartan functionals to prove new results in that direction, such as Bernstein theorems, a uniqueness result, and removability of singularities for Finsler-minimal graphs, isoperimetric inequalities and enclosure theorems for minimal immersions in Finsler space, and we treat the Plateau problem in Finsler 3-space.