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"Method of Orienting Lines for Minimizing
a Sum of Euclidean Norms"
(joint work D.T. Giang and L.H. Trang)

Abstract:

So far, solutions of the problem of minimizing a sum of Euclidean norms are approximate. Based on the idea of the method of orienting curves, introduced by Phu in "Zur Losung einer regularen Aufgabenklasse der optimalen Steuerung in Grossen mittels Orientierungskurven, *Optimization*, **18** (1987) pp. 65-81", for solving optimal control problems with state constraints, we introduce an exact algorithm for solving a problem of minimizing a sum of Euclidean norms. The concepts "final lines" and "orienting lines" are introduced and the exact solution of the problem is determined by points on orienting lines and a final line.