

Game Theory Approach to Malfatti's Problem

R.Enkhbat and G.Battur

Institute of Mathematics, National University of Mongolia,
Ulaanbaatar, Mongolia
<http://www.springer.com/lncs>

Abstract. We consider Malfatti's problem from a view point of Game theory. The problem reduces to a generalized Nash equilibrium problems with shared constraints. For solving the problem numerically, we use Nikaido-Isoda function and penalized techniques for nonconvex constraints.

Keywords: Malfatti's problem, Nikaido-Isoda function, nonconvex optimization

References

1. Enkhbat, R.: Global Optimization Approach to Malfatti's Problem Journal of Global optimization May 2016, Volume 65, Issue 1, pp 33-39
2. Zalgaller, V.A.: An inequality for acute triangles. Ukr. Geom. Sb. 34, 10-25 (1991)Google Scholar
3. Strekalovsky, A.S.: On the global extrema problem. Sov. Math. Dokl. 292(5), 1062-1066 (1987)