

The Method of Orienting Curves and its Applications

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The method of orienting curves, which was developed for solving optimal control problems with state constraints, is presented together with some applications, such as

- a Steiner's problem of finding an inpolgon with minimal circumference,
- a Zermelo's navigation problem,
- optimal control of a hydroelectric power plant,
- an inventory problem,
- time-optimal control of manipulator along a prescribed trajectory,
- finding the convex envelope of finite planar points.