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Connections to Sum-of-Squares Methods

Robust Direct Trajectory Optimization Using Approximate Invariant Funnels

Journal Club. Team 3



BSc Federico Girlanda

DEKI Robotics Innovation Center Bremen





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An algorithm that reason about robustness



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Reference

 Z. Manchester and S. Kuindersma, "DIRTREL: Robust Trajectory Optimization with Ellipsoidal Disturbances and LQR Feedback"

Contribute

- In the case of ellipsoidal disturbance sets, fast evaluations of robust cost and constraint functions.
- Algorithm that improves tracking performance over non-robust formulations while incurring only a modest increase in computational cost.
- Evaluation of the algorithm in several simulated robot control tasks.

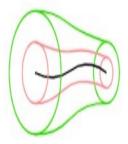


Figure 1: running man





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Thanks for your attention

