

# Strong Metric Subregularity and the Convergence of Optimization Methods for Affine Control Problems

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Optimal control problems, where the dynamics and the objective functional are affine with respect to the control, are challenging for qualitative analysis, approximations and numerical solving because of the lack of coercivity and the typical discontinuity of the optimal control. The talk will present results in all the three directions mentioned above, based on recent joint works with J. Preininger, T. Scarinci, and P. Vuong. The results are based on the strong regularity property of the associated Pontryagin system and an approximation bringing into the problem a certain strong convexity.