

Dual control: benefits and challenges

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Abstract:

Traditional paradigm of adaptive control is typically based on certainty-equivalence principle for its simplicity. The theoretical concept of dual control is well known but usually avoided in practical applications for its computational difficulties.

In this talk, I will present a motivating example where dual control is of great interest and outline possible approaches how to solve it. The final solution is however far from complete and presents many interesting problems for future research.