

# The discrete time $H\infty$ control problem with measurement feedback

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# The discrete time $H_\infty$ control problem with measurement feedback

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Up to now  $H_\infty$  control has been studied for continuous time systems. In this talk we will present a complete solution of the discrete time  $H_\infty$  control problem. As in [1] the existence of a stabilizing dynamic output feedback which makes the  $H_\infty$  norm less than some a priori given bound  $\gamma$ , is equivalent to the existence of two stabilizing solutions of discrete algebraic Riccati equations which satisfy certain extra conditions. As in the continuous time case the quadratic term of these Riccati equations is indefinite.

## References

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