



**ROBUST H_∞ OUTPUT FEEDBACK CONTROLLER
OF DELAY SINGULAR SYSTEMS**

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Abstract

This paper deals with the robust H_∞ output feedback problem for a class of time delays systems. A sufficient and necessary condition for the existence of an H_∞ output feedback controller is given in terms of linear matrix inequalities (LMI). The desired H_∞ output feedback controller can be obtained by solving these LMIs. A numerical example is given to demonstrate the application of the proposed method.

Keywords and phrases: singular system, H_∞ output feedback controller, LMI, time-delay.