Thesis Title	An Adaptive Full-Order Observer for Speed-Sensorless Induction Motor Drives
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Abstract

This thesis presents an adaptive full-order observer for speed-sensorless induction motor drives. The analytical stability conditions were firstly derived to provide a general framework for the feedback gain design. Closed-form solutions of the stabilizing feedback gains, which are easy to implement, are consequently given. The observers are satisfied by both the global and local stability criteria. Simulation and experimental results are shown to verify the validity of the proposed sensorless control system.

Keywords: Speed-sensorless induction motor drives / Stability / Adaptive full-order adaptive observer / Feedback gain