## ILC Design for MIMO Systems

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## Abstract

Iterative Learning Control (ILC) is based on the notion that a system that executes the same task repeatedly can learn from the previous executions to improve its performance. ILC algorithm is particularly useful for systems with model uncertainties and repeated disturbances as only a minimal knowledge about the system parameters is necessary for convergence. In here, we introduce two novel ILC algorithms that are based on observer design and Kalman filtering, both of which can be used to deal with discrete time linear time invariant MIMO systems.