

## Time delay systems: methods, applications and new trends

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20398929&lokasi=lokal>

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### Abstrak

This volume is concerned with the control and dynamics of time delay systems; a research field with at least six-decade long history that has been very active especially in the past two decades. In parallel to the new challenges emerging from engineering, physics, mathematics, and economics, the volume covers several new directions including topology induced stability, large-scale interconnected systems, roles of networks in stability, and new trends in predictor-based control and consensus dynamics. The associated applications/problems are described by highly complex models, and require solving inverse problems as well as the development of new theories, mathematical tools, numerically-tractable algorithms for real-time control. The volume, which is targeted to present these developments in this rapidly evolving field, captures a careful selection of the most recent papers contributed by experts and collected under five parts : (i) methodology : from retarded to neutral continuous delay models, (ii) systems, signals and applications, (iii) numerical methods, (iv) predictor-based control and compensation, and (v) networked control systems and multi-agent systems.