

Robust Feedback Loop Design for Distributed Parameter Systems

The vast majority of research in the area of control engineering deals with systems which are typically modelled by **ordinary differential equations**. While these systems cover a wide range of physical phenomena, there remain many processes which require modelling via **partial differential equations**. Extending existing (robust) control schemes to these so-called **distributed parameter systems** and dealing with the increased mathematical complexity pose interesting challenges in this research field.

Examples:

- Temperature control of a flow reactor
- Damping of an oscillating beam
- Robust temperature control of silicon wafer

