Reading and Reference List
Applying Ideas from Control Systems Engineering to Behavioral Interventions

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An excellent introduction to the topic of adaptive interventions:

A paper inspired by [1] that is the basis for much of the content in this presentation:

A report that describes the technical content in [2] in more detail:

Recent work from our laboratory showing how Model Predictive Control can be used for decision-making in adaptive behavioral interventions:

Two tutorials on engineering control theory; the one at SPR was presented recently, while the SAMSI one focuses on mechanistic modeling issues.


Some good process modeling and control texts; these focus on mechanistic models of engineering systems, and require prior working knowledge of differential equations:


A good web-based reference for introductory control engineering theory:


Some good references on Internal Model Control and Model Predictive Control:


A tutorial on system identification (i.e., dynamic modeling from data):


System identification and feedback control, presented from a primarily statistical perspective:


Some system identification texts written (or co-authored) by Lennart Ljung, an eminent scholar in the field and developer of Matlab’s System Identification Toolbox:


This paper shows how to represent the Theory of Planned Behavior as a dynamical system: