REFERENCES

Some of references below can be down-loaded at

`http://www.math.rug.nl/~trentelman/publications.html`
`http://www.math.rug.nl/~willems/publications.html`
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Over the years, many research topics in behavioral systems theory, in addition to those already cited, have been pursued in our group in Groningen. We mention in particular the Ph.D. dissertations of C. Heij and of B. Roorda on *System Identification*, of S. Weiland on *System Approximation and Dissipativity*, of F. Fagnani on *Symmetries*, and of P. Rocha on $2-D$ *Systems*. We also like to mention the work with M. Kuijper on *Linear Recurrence Relations*, with M.E. Valcher on *Observers*, with J.W. Nieuwenhuis on *Continuity of Systems*, and with A. Sasane on *Time-controllability of PDE's*.

Many other authors have used ideas of behavioral systems theory in their research. This includes the work by D. Forney, F. Fagnani & S. Zampieri, and J. Rosenthal and their co-workers on *Convolutional Coding*, by R. D'Andrea & J. Doyle, A. Stoorvogel & S. Weiland, and especially G. Meinsma on $\mathcal{H}_\infty$ *Control*, by O. Kaneko & T. Fujii on dissipative systems, by H. Schumacher on *System Representations*, by J.W. Polderman on *Adaptive Control*, by K. Rudie on *DES*, by A. Antoulas on *Exact modeling from data*, by H. Glüsing-Lüerssen, S. Zampieri, and P. Rocha on *Differential-Delay Systems*, by U. Oberst, E. Zerz, J. Wood, E. Rogers, and their co-workers on *N-D systems*, etc.

Behavioral systems theory is an outgrowth of a long process of searching for the appropriate concepts and language for discussing *open* dynamical systems, i.e., systems in interaction with their environment. As such, one can trace many of the ideas to earlier and contemporary research in systems theory and related areas. In this context, we would like to acknowledge the inspiration through the work by V. Belevich and R. Newcomb in electrical circuit theory, by H. Rosenbrock and W. Wolovich, the seminal work by P. Fuhrmann on many aspects of polynomial descriptions of linear systems, and the rich circle of ideas in the theory of automata and formal languages.

Structures very similar to the algebraic structure that emerges from the behavioral approach to linear systems has been independently pursued by a number of authors in the context of nonlinear differential-algebraic systems. We mention in particular the work of M. Fliess and his co-workers where the notion of *flatness* (very much related our image representations) has emerged as a particularly useful idea. Strongly related research has been carried out by J.-F. Pommaret and A. Quadrat, and by T. Glad and his co-workers.