

Zhong-Ping Jiang (zjiang@control.poly.edu), Department of Electrical and Computer Engineering, Polytechnic University, Brooklyn, NY 11201, *Control of Interconnected Nonlinear Systems: A Small-Gain Viewpoint*

The small-gain method for robust nonlinear control is reviewed and is further ameliorated to cover important classes of interconnected systems in dynamically perturbed, decentralized, or discrete time forms. Both partial-state and output feedback control problems are considered. It is shown that assumptions required in related but independent work of others can be significantly relaxed. An application to ship control will be shown as an illustrative example. *Acknowledgements:* It is a pleasure to thank I. Mareels, L. Praly, A. Teel and Y. Wang for fruitful collaboration on some of the topics discussed here.