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Algorithms for the Control of Low Dimensional Chaos in the presence of System Parameter Drift<sup>1</sup> THOMAS OLSEN, KJELL SCHRODER, Lewis & Clark College, Portland, OR, KATHERINE CARRIKER, BONITA SQUIRES, KARA YEDINAK, RICHARD WIENER, Pacific University, Forest Grove, OR — The chaotic formation of Taylor-Vortex pairs in Modified Taylor-Couette flow with hourglass geometry may be controlled by the application of Recursive Proportional Feedback algorithm<sup>2,3</sup>. We consider other algorithms that might be effective in the same context. We continue our studies of their effectiveness. We present numerical simulations and analysis to determine the stability and robustness of these new algorithms as the parameters that define the system drift.

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<sup>2</sup>Rollins *et al*, Phys. Rev. E **47**, R780 (1993).

<sup>3</sup>Wiener *et al*, Phys. Rev. Lett. **83**, 2340 (1999).

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