A MULTIPLE-MODEL APPROACH TO MODEL COMPLEX NONLINEAR SYSTEMS.

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In this paper the multiple-model approach to identify nonlinear complex systems is used. Using a real HVAC system, located at the University of Reading, UK, the multiple-model approach was tested and compared with some nonlinear identification techniques. The known nonlinearities associated to this type of systems are used to test the multiple-model identification algorithms, using a real system. A different switching mechanism is presented, based on optimization algorithms, and compared with different switching approaches.

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