

ECEN 667

Power System Stability

Lecture 20: Forced Oscillation Detection

Prof. Adam Birchfield

Dept. of Electrical and Computer Engineering

Texas A&M University

abirchfield@tamu.edu



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Announcements



- By Nov 20th read the following two papers
 - K. Huang, M. Xiong, Y. Liu and K. Sun, "A Heterogeneous Multiscale Method for Efficient Simulation of Power Systems With Inverter-Based Resources," in *IEEE Transactions on Power Systems*, vol. 40, no. 5, pp. 4292-4306, Sept. 2025.
 - M. Xiong *et al.*, "EMT-TS Hybrid Simulation for Large Power Grids Considering IBR-Driven Dynamics," *IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society*, Chicago, IL, USA, 2024, pp. 1-6.
- HW #5 is on the website, due Nov 20th at 8 AM.
- **Exam 2 will be Tuesday, December 2nd, 2025**

Paper Discussion



- S. Maslennikov and E. Litvinov, "ISO New England Experience in Locating the Source of Oscillations Online," in *IEEE Transactions on Power Systems*, vol. 36, no. 1, pp. 495-503, Jan. 2021