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**Relevance of Linear Stability Results to Enhanced Oil Recovery**<sup>1</sup> XUERU DING, PRABIR DARIPA, Texas A&M University — How relevant can the results based on linear stability theory for any problem for that matter be to full scale simulation results? Put it differently, is the optimal design of a system based on linear stability results is optimal or even near optimal for the complex nonlinear system with certain objectives of interest in mind? We will address these issues in the context of enhanced oil recovery by chemical flooding. This will be based on an ongoing work.

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