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David R Wells* (drwells@vt.edu). *Stabilization of POD-ROMs.*

Proper Orthogonal Decomposition, or POD, is an important technique in the field of Reduced Order Modeling, or ROM. By definition, a reduced order model cannot recover all scales of motion present in the original model, which can be a source of instability that unnecessarily hinders the ROM. In this talk we will discuss stabilization techniques for POD-ROMs inspired by stabilization techniques in Finite Element methods. We will show both error estimates and numerical examples that benefit from stabilization. (Received September 22, 2014)