

# New Developments for TRPOD

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TRPOD is a concept which merges Trust Region methods from optimization with Proper Orthogonal Decomposition techniques in reduced order modeling. We reconsider this concept for flow problems with high Reynolds numbers and discuss the suitability of several variants of computational modification. Another aspect that will be addressed is the use of multiscale optimization techniques. These techniques improve the computational efficiency tremendously and we show in theory and numerical results how this is applied successfully to TRPOD.

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