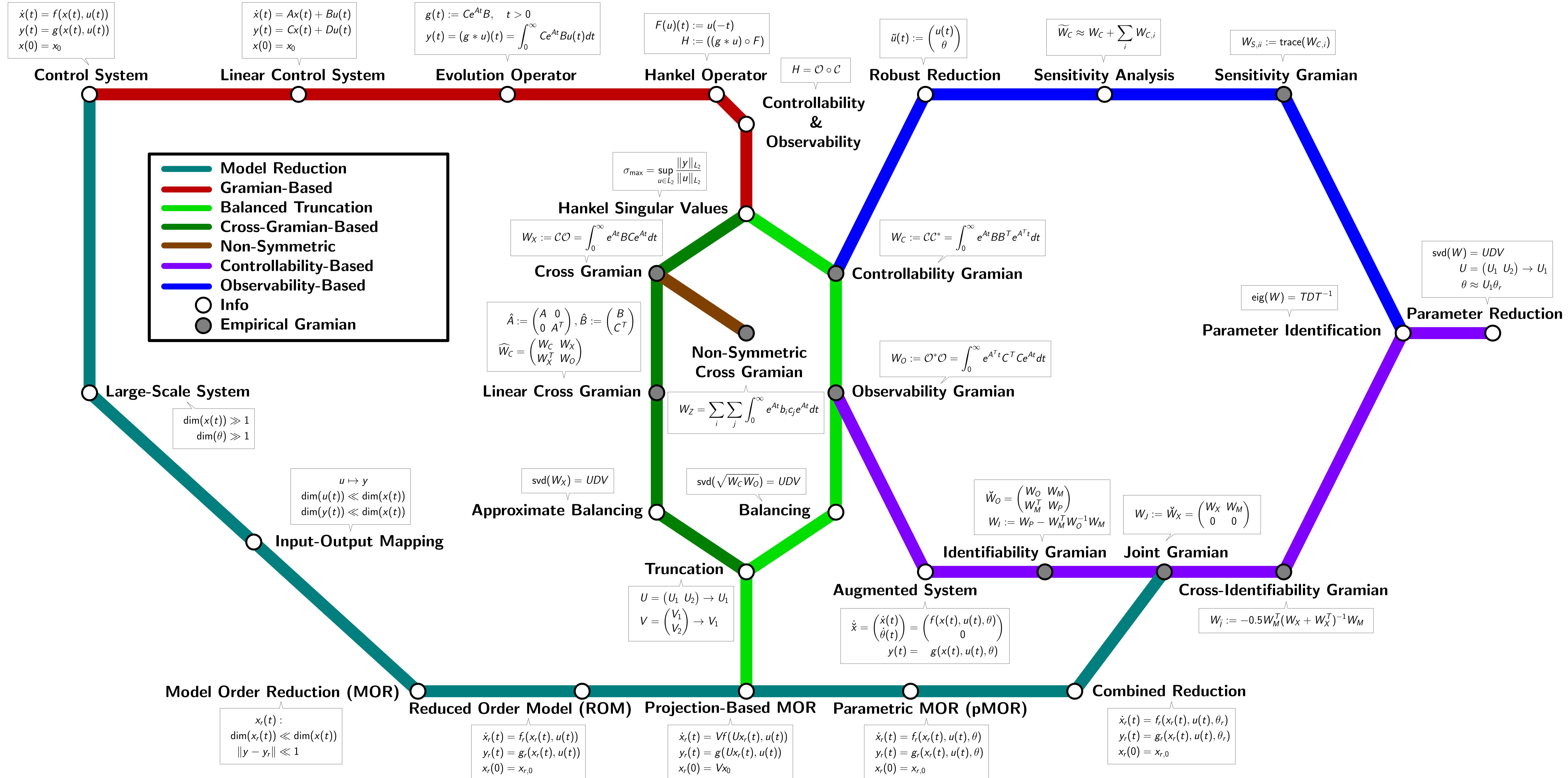


# emgr - Empirical Gramian Framework Model Order Reduction Software

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Read Me

- C. Himpe and M. Ohlberger. A Note on the Cross Gramian for Non-Symmetric Systems. arXiv (Preprint, Submitted) math.OC(1501.05519): 1–6, 2015.
- C. Himpe and M. Ohlberger. The Empirical Cross Gramian for Parametrized Nonlinear Systems. Mathematical Modelling 8(1): 727–728, 2015.
- C. Himpe and M. Ohlberger. Cross-Gramian-Based Combined State and Parameter Reduction for Large-Scale Control Systems. Mathematical Problems in Engineering 2014: 1–13, 2014.
- C. Himpe and M. Ohlberger. Model Reduction for Complex Hyperbolic Networks. Proceedings of the European Control Conference: 2739–2743, 2014.
- C. Himpe and M. Ohlberger. A Unified Software Framework for Empirical Gramians. Journal of Mathematics 2013: 1–6, 2013.

emgr (Version 3.1)

- Open Source (BSD 2-Clause-License)
- Compatible with Octave, Matlab, FreeMat
- Uniform Interface
- Vectorized & Parallelizable
- No Dependencies
- (Nonlinear) Model Reduction
- Sensitivity Analysis / Robust Reduction
- Parameter Identification / Parameter Reduction
- Combined State and Parameter Reduction !
- System Identification / Decentralized Control

go to <http://gramian.de>