

# Paper Validation Report for **EnsembleSINDy**



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**Correspondence: Yes**  
**Percentages: 80.0%**

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## **Conclusion:**

The repository contains MATLAB implementations of all main algorithms referenced in the paper (Weak SINDy for ODEs and PDEs, ensemble/double-bagging, MPC experiments) together with scripts that reproduce the Lorenz, Lotka–Volterra, and weak-PDE benchmark studies, generate or load the required data, compute the reported error/success metrics, and produce the same types of figures shown in the paper. Although exact numerical values may vary because of bootstrapping and because some scripts optionally load pre-computed MAT files, every step of the experimental pipeline is present and runnable, so the core results are reproducible with minimal manual intervention. Minor gaps (e.g., dependence on external MATLAB toolboxes, stochastic variability, optional pre-saved data) prevent a perfect score but overall compliance with the paper's experimental claims is strong.