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# SIAM Journal on Mathematics of Data Science

- Optimal Approximation with Sparsely Connected Deep Neural Networks (Helmut Bölcskei, Philipp Grohs, Gitta Kutyniok, and Philipp Petersen)
- Clustering with t-SNE, Provably (George C. Linderman and Stefan Steinerberger)
- New Error Bounds for Deep ReLU Networks Using Sparse Grids (Hadrien Montanelli and Qiang Du)

## Multiscale Modeling and Simulation

- Numerically Modeling Stochastic Lie Transport in Fluid Dynamics (Colin Cotter, Dan Crisan, Darryl D. Holm, Wei Pan, and Igor Shevchenko)
- On the Convergence of the SINDy Algorithm (Linan Zhang and Hayden Schaeffer)
- Hybrid Models for Simulating Blood Flow in Microvascular Networks (Ettore Vidotto, Timo Koch, Tobias Köppl, Rainer Helmig, and Barbara Wohlmuth)

## SIAM Journal on Applied Algebra and Geometry

 DSOS and SDSOS Optimization: More Tractable Alternatives to Sum of Squares and Semidefinite Optimization (Amir Ali Ahmadi and Anirudha Majumdar)

- Khovanskii Bases, Higher Rank Valuations, and Tropical Geometry (Kiumars Kaveh and Christopher Manon)
- Species Tree Inference from Genomic Sequences Using the Log-Det Distance (Elizabeth S. Allman, Colby Long, and John A. Rhodes)

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- Discovery of Nonlinear Multiscale Systems: Sampling Strategies and Embeddings (Kathleen P. Champion, Steven L. Brunton, and J. Nathan Kutz)
- Data-Driven Identification of Parametric Partial Differential Equations (Samuel Rudy, Alessandro Alla, Steven L. Brunton, and J. Nathan Kutz)

## SIAM Journal on Applied Mathematics

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