

Stochastic Differential Geometry Publications

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JOURNAL PAPERS

2010s

- (1) M. Piggott and V. Solo, Geometric Euler-Maruyama Schemes for Stochastic Differential Equations in $SO(N)$ and $SE(N)$, SIAM. J. Numerical Analysis, 54, 2490-2516, 2016.
- (2) G Marjanovic, V Solo, Numerical Methods for Stochastic Differential Equations in Matrix Lie Groups Made Simple, IEEE Trans. Autom. Control, 63, 4035-4050, 2018.

IEEE REFEREED CONFERENCE PAPERS

2000s

- (1) V Solo, On Nonlinear State Estimation in a Riemannian Manifold, Proc IEEE CDC, Beijing China , pp 8500-8505, December 2009.

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- (2) V Solo, Attitude Estimation and Brownian Motion on $SO(3)$. Proc IEEE Conference on Decision and Control, Atlanta, Georgia, pp 4857-4862, December 2010.
- (3) M Ulfarsson and V Solo , Sparse Variable Reduced Rank Regression via Stiefel Optimization , Proc IEEE ICASSP, Prague, p 3892-3895 , May 2011.
- (4) V Solo, Averaging Stability Analysis of a new Attitude Estimation Algorithm, Proc IEEE ICASSP, Kyoto, Japan, pp 3289-3292, March 2012.
- (5) V Solo, Stochastic Stability of an Attitude Estimation Algorithm on $SO(3)$, Proc IEEE Conference on Decision and Control, Maui, USA, 2012, pp 1265-1270.
- (6) V Solo, An Approach to Stochastic System Identification in Riemannian Manifolds, Proc IEEE CDC, Los Angeles , pp 6510-6515 , December 2014.

- (7) M Piggott, V Solo, Stochastic Numerical Analysis For Brownian Motion On $SO(3)$, Proc IEEE CDC, Los Angeles, pp 3420-3425, December 2014.
- (8) M. J. Piggott, V. Solo, Tikhonov-Galerkin Stochastic System Identification in $SO(3)$, Proc IEEE ICASSP, Brisbane, pp 4175-4179, April 2015.
- (9) V Solo, Stochastic System Identification in $SO(3)$, Proc IEEE CDC, Osaka, Japan , pp 1186-1191 , December 2015.
- (10) G Marjanovic, M. Piggott, V Solo, A Simple Approach to Numerical Methods for Stochastic Differential Equations in Lie Groups, Proc IEEE CDC, Osaka, Japan, pp 7143-7150, December 2015.
- (11) G. Marjanovic and V. Solo, An Engineer's Guide to Particle Filtering on Matrix Lie Groups, Proc IEEE ICASSP, pp 3969-3973, March 2016.
- (12) G. Marjanovic, M. Piggott, and V. Solo, Numerical Methods for Stochastic Differential Equations in the Stiefel Manifold Made Simple, Proc IEEE CDC, pp 2853-2860 ,2016.
- (13) G Marjanovic, V Solo, An Engineer's Guide to Particle Filtering on the Stiefel Manifold, Proc IEEE ICASSP, pp3834-3838 ,2017.
- (14) V. Solo, G. Chirikjian, Ito, Stratonovich and Geometry, Proc IEEE CDC, pp3026-3032, Dec. 2019.
- (15) V. Solo, Z. Wang, Numerical Methods for Stochastic Differential Equations in Stiefel Manifolds via the Cayley Transform, Proc IEEE CDC, pp3033-3038, Dec. 2019.

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- (16) V.Solo, G.S. Chirikjian, On the Cramer-Rao Bound in Riemannian Manifolds with Application to $SO(3)$, Proc. IEEE CDC, to appear, Dec. 2020.
- (17) Z. Wang, V. Solo, Particle Filtering on the Stiefel Manifold with Optimal Transport, Proc. IEEE CDC, to appear, Dec. 2020.