

## Books

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D. Brillinger, P. E. Caines, J. Gweke, E. Parzen, M. Rosenblatt, M. S. Taqqu, Eds, **New Directions in Time Series Analysis, Parts I and II**, The IMA Volumes in Mathematics and Its Applications, Vols. 45 and 46, Springer-Verlag, NYC, 1992 and 1993.

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## Articles in Journals and Books : Under Review

1. P.E. Caines, D. Ho, M.Y. Huang and Q.Song. "On the Graphon Mean Field Game Equations: Individual Agent Affine Dynamics and Mean Field Dependent Performance Functions", *ESAIM: Control, Optimisation and Calculus of Variations (ESAIM: COCV)*, under review.

## Articles in Journals and Books : Under Revision

1. P. E. Caines and M.Y. Huang, "Graphon Mean Field Games and the GMFG Equations. *SIAM Journal on Control and Optimization*. Submitted 24 Aug 2020; Under Revision 2021; arXiv:2008.10216v1 [math.OC]

## Articles in Journals and Books : To appear

1. S. Gao, P.E. Caines, "Subspace Decomposition for Graphon LQR: Applications to VLSNs of Harmonic Oscillators", *IEEE Transactions on Network Control Systems, Special issue on the Control of Very-large Scale Robotic (VLSR) Networks*, to appear, 2021.
2. S. Gao, R. Foguen Tchuendom and P.E. Caines, "Linear Quadratic Graphon Field Games" *Communications in Information and Systems*, to appear, 2021.

## Articles in Journals and Books : Published

1. D. Firoozi, and P. E. Caines, “ $\epsilon$ -Nash Equilibria for Major-Minor LQG Mean Field Games with Partial Observations of All Agents”, *IEEE Trans.on Automatic Control*, June, 2021, Vol 66, No. 6, pp 2778 - 2786. On-line: DOI: 10.1109/TAC.2020.3010129
2. S. Gao and P. E. Caines, “Graphon Control of Large-Scale Networks of Linear Systems”, *IEEE Transactions on Automatic Control*, Oct., 2020, Vol. 65, No. 10, pp. 4090-4105
3. P.E. Caines and D. Levanony, “On Bounded Solutions of Linear SDEs Driven by Convergent Dynamics Matrix Processes with Hurwitz Limits,” *Stochastics*, 2020. On-line: <https://doi.org/10.1080/17442508.2020.1804904>
4. D. Firoozi, S. Jaimungal and P. E. Caines, ”Convex Analysis for LQG Systems with Applications to Major-Minor LQG Mean-Field Game Systems”, *Systems & Control Letters*, 2020, vol 142, p.104734  
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<http://www.sciencedirect.com/science/article/pii/S0167691120301158>  
(arXiv, <https://arxiv.org/abs/1810.07551>)
5. A. Pakniyat and P.E. Caines, “On the Hybrid Minimum Principle: The Hamiltonian and Adjoint Boundary Conditions”, *IEEE Trans.on Automatic Control*, May, 2020, DOI: 10.1109/TAC.2020.2992450.
6. P.E. Caines, “Mean Field Game Theory: A Tractable Methodology for Large Population Problems”, *SIAM News*, April, 2020, pp 5-6
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8. P. E. Caines and M.Y. Huang, ”Graphon Mean Field Games and the GMFG Equations:  $\epsilon$ -Nash Equilibria” . Published as Cahier du GERAD: G-2019-81, November, 2019, pp. 286-292 (see Conferences).
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