

List of publications of Martino BARDI

Books

3. M. Bardi, I. Capuzzo-Dolcetta: Optimal control and viscosity solutions of Hamilton-Jacobi-Bellman equations. *Systems & Control: Foundations & Applications*. Birkhäuser, Boston, 1997. (MR 99e:49001) 2nd printing, Modern Birkhäuser Classics, 2008.
2. M. Bardi, T. Parthasarathy, T.E.S. Raghavan editors: Stochastic and differential games: theory and numerical methods, *Ann. Internat. Soc. Dynam. Games* vol. 4, Birkhäuser, Boston, 1999. (MR 99m:90005)
1. M. Bardi, M.G. Crandall, L.C. Evans, H.M. Soner, P.E. Souganidis: Viscosity solutions and applications (Montecatini Terme, 1995). Edited by I. Capuzzo Dolcetta and P. L. Lions. *Lecture Notes in Mathematics*, 1660. Springer-Verlag, Berlin, 1997. (MR 98f:49029)
[MR = Mathematical Reviews]

Research papers

(mostly available at <http://cvgmt.sns.it/people/bardi/>)

68. M. Bardi, A. Cesaroni, L. Rossi: Nonexistence of nonconstant solutions of some degenerate Bellman equations and applications to stochastic control, to appear in *ESAIM Control Optim. Calc. Var.*
67. M. Bardi, J.P. Maldonado Lopez: A Dijkstra-type algorithm for dynamic games, *Dyn. Games Appl.* (2015) DOI: 10.1007/s13235-015-0156-0
66. M. Bardi, A. Cesaroni, A. Scotti: Convergence in Multiscale Financial Models with Non-Gaussian Stochastic Volatility, to appear in *ESAIM Control Optim. Calc. Var.* DOI: 10.1051/cocv/2015015
65. M. Bardi, A. Cesaroni, D. Ghilli: Large deviations for some fast stochastic volatility models by viscosity methods, *Discrete Contin. Dyn. Syst.* 35 (2015), 3965–3988. DOI: 10.3934/dcds.2015.35.3965
64. M. Bardi, F.S. Priuli: Linear-Quadratic N -person and Mean-Field Games with Ergodic Cost, *SIAM J. Control Optim.* 52 (2014), 3022–3052. DOI: 10.1137/140951795
63. M. Bardi, G. Terrone: Periodic homogenization of deterministic control problems via limit occupational measures, to appear in “Mathematics of Planet Earth: Dynamics, Games, and Science”, J.-P. Bourguignon, R. Jeltsch, A. Pinto, M. Viana eds., *CIM Series in Mathematical Sciences* 1, Springer. DOI: 10.1007/978-3-319-16118-1_7
62. Bardi, M.; Dragoni, F.: Subdifferential and Properties of Convex Functions with respect to Vector Fields, *J. Convex Analysis* 21 (2014), 785–810.
61. M. Bardi, F.S. Priuli: LQG Mean-Field Games with ergodic cost, *Proc. 52nd IEEE-CDC*, Florence, 2013, 2493–2498.
60. M. Bardi, P. Mannucci: Comparison principles and Dirichlet problem for fully nonlinear degenerate equations of Monge-Ampère type. *Forum Math.* 25 (2013), 1291–1330; DOI: 10.1515/forum-2013-0067

59. M. Bardi, G. Terrone: On the Homogenization of some Non-coercive Hamilton-Jacobi-Isaacs Equations, *Commun. Pure Appl. Anal.* 12 (2013), 207–236; DOI:10.3934/cpaa.2013.12.237
58. M. Bardi: Explicit solutions of some Linear-Quadratic Mean Field Games, *Netw. Heterog. Media* 7 (2012), 243–261; DOI:10.3934/nhm.2012.7.243
57. M. Bardi, F. Dragoni: Convexity and Semiconvexity along Vector Fields, *Calc. Var. Partial Differential Equations* 42 (2011), 405–427.
56. M. Bardi, A. Cesaroni: Optimal control with random parameters: a multiscale approach, *Eur. J. Control* 17 (2011), 30–45.
55. M. Bardi, A. Cesaroni; L. Manca: Convergence by viscosity methods in multiscale financial models with stochastic volatility, *SIAM J. Finan. Math.* 1 (2010), 230–265.
54. O. Alvarez, M. Bardi: Ergodicity, stabilization, and singular perturbations for Bellman-Isaacs equations, *Mem. Amer. Math. Soc.* 204 (2010), pp. 1-88.
53. M. Bardi: On differential games with long-time-average cost, In "Advances in Dynamic games and their Applications", P. Bernhard, V. Gaitsgory, O. Pourtallier editors, pp. 3-18, *Annals of the Internat. Soc. Dynam. Games*, 10, Birkhäuser, Boston, 2009.
52. M. Bardi, P. Mannucci: Comparison Principles for equations of Monge-Ampère type in Carnot groups: a direct proof, *Lecture Notes of Seminario Interdisciplinare di Matematica Vol. 7* (2008), 41–51.
51. M. Bardi, P. Mannucci: Comparison Principles for subelliptic equations of Monge-Ampère type, *Boll. Unione Mat. Ital.* (9) 1 (2008), 489–495.
50. O. Alvarez, M. Bardi, C. Marchi: Multiscale singular perturbations and homogenization of optimal control problems, in "Geometric Control and Nonsmooth Analysis", F. Ancona, A. Bressan, P. Cannarsa, F.H. Clarke, P.R. Wolenski eds., pp. 1–27, *Series on Advances in Mathematics for Applied Sciences*, 76, World Scientific Publishing, Singapore 2008.
49. M. Bardi, A. Cesaroni: Almost sure properties of controlled diffusions and worst case properties of deterministic systems, *ESAIM Control Optim. Calc. Var.* 14 (2008), 343–355.
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47. Alvarez, O.; M. Bardi: Ergodic problems in differential games, in "Advances in Dynamic Game Theory", S. Jorgensen, M. Quincampoix, and T.L. Vincent eds., pp. 131–152, *Ann. Internat. Soc. Dynam. Games*, 9, Birkhäuser, Boston, 2007.
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Conference proceedings, preprints, technical reports, lecture notes

(mostly available at <http://cvgmt.sns.it/people/bardi/>)

13. M. Bardi, E. Feleqi: Nonlinear elliptic systems and mean field games, preprint 2015.

12. Bardi, M.; Dragoni, F.: Convexity along vector fields and applications to equations of Monge-Ampère type. Progress in analysis and its applications, 455-462, World Sci. Publ., Hackensack, NJ, 2010.
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