Publications from the HEC-AIMS projects in 2022

Perspectives in Stochastic Optimization and Applications
Cooperation between the GRC at AIMS Ghana (Dr. Olivier M. Pamen) and the University of Cottbus-Senftenberg

Published Journal Papers

1. M Bogso, M. Dieye and O. Menoukeu Pamen: Stochastic integration with respect to the local time of the Brownian sheet and regularisation properties of Brownian sheet curves. Bernoulli, accepted (2022)

2. S. Dai and O. Menoukeu Pamen: ``An algorithm based on an iterative optimal stopping method for Feller processes with applications to impulse control, perturbation, and possibly zero random discount problems". J. Comput. Appl. Math. (2022) https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.cam.2022.114864&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=g1%2FNwV2eGHh8dUAraV%2B0fiA3XllmAyE5hLSe4a88HmI%3D&reserved=0

3. A.-M. Bogso, M. Dieye, and O. Menoukeu Pamen: ``Path-by-path uniqueness of multidimensional SDE's on the plane with nondecreasing coefficients". Elect. J. Probab. , 27: 1--26, (2022). (26p)

4. R. M. Mbala, D. J. Fotsa-Mbogne, J. M.Nlong, O. Menoukeu-Pamen, J.-R. Kala-Kamdjoug: ``Optimization of Wi-Fi direct average time to discovery: a global channel randomization approach". Optim Eng (2022). https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1007%2Fs11081-022-09749-w&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=PFtDZiWvmi3fxx3TvdTHmxCVF4MIe1xmKBy3NktQAzw%3D&reserved=0

5. A. Babi Babi, M. Dieye and O. Menoukeu-Pamen: ``Strong convergence of the Euler-Maruyama approximation for SDEs with unbounded drift". Stochastic Analysis and Application (2022). https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1080%2F07362994.2022.2047726&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=bvjYWzqegwrddKnHPyhBWmBl87ATWG7aD%2BRPBUGP7bY%3D&reserved=0

6. R. L. Pellat, O. Menoukeu Pamen and Y. Ouknine: ``A class of quadratic forward-backward stochastic differential equations". J. Math. Anal. Appl., 514 (2) 126100, (2022). (39p)

Published preprints

1. P.H. Takam, R. Wunderlich, On the Input-Output Behavior of a Geothermal Energy Storage: Approximations by Model Order Reduction.
2. (2022) https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Farxiv.org%2Fpdf%2F2209.14761.pdf&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIj

oiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=beirariiY7FWiwgtlhGU4vKGB0MFNA7GYlSUNqfSsOc%3D&reserved=0

3. O. Menoukeu Pamen and L. Tangpi: Maximum principle for stochastic control of SDEs with measurable drifts. (2022)
https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Farxiv.org%2Fabs%2F2101.06205&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=omWjzmHNXvxeIsufmx7Qkf%2FVtVimW4ZgNciyrCM%2FvzI%3D&reserved=0

4. P. Imkeller and O. Menoukeu Pamen: Takagi type functions and dynamical systems: the smoothness of the SBR measure and the existence of local time. (2022)
https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Farxiv.org%2Fabs%2F2107.07185v1&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=W7qi8gq7ytj1fWYMBxFIvDruDj3Elew6lOdsIOIrkCw%3D&reserved=0.

5. P. Imkeller, R. Likibi Pellat and O. Menoukeu Pamen: Differentiability of quadratic forward-backward SDEs with rough drift. (2022)
https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Farxiv.org%2Fabs%2F2210.05622&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=5HUg8psM4dcngAIt%2B3VNEdJw2YIj8byNiZakKoL9nWQ%3D&reserved=0

6. A.M. Bogso and O. Menoukeu Pamen: Malliavin differentiability of solutions of hyperbolic stochastic partial differential equations with irregular drifts. (2022)
https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Farxiv.org%2Fabs%2F2210.04694&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=RXB4XDLV0PPLftYrlV%2Br1UZgnL6bUsD6p9SROsUA750%3D&reserved=0

7. H. L. Nyandjo-Bamen, J.-M Ntaganda , A. Tellier and O. Menoukeu Pamen: Impact of imperfect vaccine, vaccine trade-off and population turnover on infectious disease dynamics. (2022)
https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Farxiv.org%2Fpdf%2F2208.02133v1.pdf&data=05%7C01%7C%7C1a9d63ebeb60403ee0c208dad6a06a59%7C30abdb70b28448308df7daa5b0052ed2%7C0%7C1%7C638058281738360980%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=czUV51qMCGqNvNx%2Fp1i3U6HzWPFAWTcDSKDF7Y203G4%3D&reserved=0