

Department of Mathematics, Indian Institute of Technology Delhi

List of publications in the year 2022 (involving department faculty)

Journals

1. Jayanthan, A. V., Kumar, Arvind, Mukundan, Vivek, On the resurgence and asymptotic resurgence of homogeneous ideals, *Mathematische Zeitschrift* 302 (4) (2022), 2407–2434.
2. Basak, Biplab, Binjola, Manisha, Minimal crystallizations of 3-manifolds with boundary. *Beitr. Algebra Geom*, 63 (4) (2022), 907–919.
3. Anthal, G. C., Giacomoni, J., Sreenadh, K., Some existence and uniqueness results for logistic Choquard equations, *Rend. Circ. Mat. Palermo (2)*, 71 (3) (2022), 997–1034.
4. Sharma, R. K., Mishra, P. R., Kumar, Yogesh, Gupta, Nupur, Differential δ -uniformity and non-linearity of permutations over Zn, *Theoret. Comput. Sci.* 936 (2022), 1–12.
5. Biswas, Reshmi, Goyal, Sarika, Sreenadh, Konijeti, Quasilinear Choquard equations involving N-Laplacian and critical exponential nonlinearity, *Math. Methods Appl. Sci.* 45 (16) (2022), 9483–9503.
6. Mehandiratta, Vaibhav; Mehra, Mani; Leugering, Günter Distributed optimal control problems driven by space-time fractional parabolic equations, *Control Cybernet* 51 (2) (2022), 191–226.
7. Dharra, Bhawna, Sivananthan, S, Completeness of discrete translates in the Hardy space $H^1(\mathbb{R})$, *Proceedings of Amer. Math. Soc.* 150 (12) (2022), 5281–5291.
8. Goyal, Prashant, Patel, Dheeraj, Sivananthan, S., Random sampling and reconstruction in reproducing kernel subspace of mixed Lebesgue spaces, *Mathematical Methods in the Applied Sciences*, 2022, <https://doi.org/10.1002/mma.8821>
9. Nguyen, Hoang Nam, Lisser, Abdel, Singh, Vikas Vikram, Random games under elliptically distributed dependent joint chance constraints, *Journal of Optim. Theory Appl.* 195 (1) (2022), 249–264.
10. Gupta, Rohit, Gahlyan, Pooja, Sharma, R. K., New classes of permutation trinomials over \mathbb{F}_q , *Finite Fields Appl.* 84 (2022), Paper No. 102110, 21 pp.

11. Dwivedi, Srashti, Tripathi, Amitabha, On the two-color Rado number for $\sum_{m=2}^i x_i + ax_{m-1} - x_m = c$, *Integers* 22 (2022), Paper No. A90, 16 pp.
12. Priyamvada, Panda, B. S., Exact square coloring of certain classes of graphs: complexity and algorithms, *Theoretical Comput. Sci.* 932 (2022), 84–101.
13. Kumar Singh, Abhishek, Mehra, Mani, Mehandiratta, Vaibhav, Numerical solution of variable-order stochastic fractional integro-differential equation with a collocation method based on Müntz-Legendre polynomial, *Math. Methods Appl. Sci.* 45 (13) (2022), 8125–8141.
14. Mehandiratta, V., Mehra, Mani, Leugering, G., Distributed optimal control problems driven by space-time fractional parabolic equations, *Control and Cybernetics* 51 (2) (2022), 191-226.
15. Kumar, Nitin, Mehra, Mani, Necessary optimality conditions for two-dimensional fractional optimal control problems and error estimates for the numerical approximation, *ZAMM - Journal of Applied Mathematics and Mechanics / Zeitschrift für Angewandte Mathematik und Mechanik*, 102 (12) (2022), 26pp
16. Banerjee, Abhishek, Kour, Surjeet, On measurings of algebras over operads and homology theories, *Algebraic. Geom. Topol.* 22 (3) (2022), 1113–1158.
17. Rao, S. Chandra Sekhara, Chawla, Sheetal, Chaturvedi, Abhay Kumar, Numerical analysis for a class of coupled system of singularly perturbed time-dependent convection-diffusion equations with a discontinuous source term, *Numer. Methods Partial Differential Equations* 38 (5) (2022), 1437–1467.
18. Mittal, Gaurav, Sharma, R. K., Wedderburn decomposition of a semisimple group algebra F_qG from a subalgebra of factor group of G , *Int. Electron. J. Algebra* 32 (2022), 91–100.
19. Acharya, Sanjib Kumar, Porwal, Kamana, Primal hybrid finite element method for the linear elasticity problem, *Appl. Math. Comput.* 435 (2022), Paper No. 127462, 14 pp.
20. Pandey, K. K., Viswanathan, P., In reference to a self-referential approach towards smooth multivariate approximation, *Numer. Algorithms* 91 (1) (2022), 251–281.
21. Naraveni, Rajashekar, Chaudhary, Sudhakar, Srinivas, Kumar VVK, Higher order approximation of biharmonic problem using the WEB-Spline based mesh-free method, *International J. Nonlinear Sci. Numer. Simul.* 23 (5) (2022), 719–734.
22. Panda, B. S., Goyal, Pooja, Hardness results of global total k -domination problem in graphs, *Discrete Appl. Math.* 319 (2022), 223–238.

23. Pandey, Kshitij Kumar, Viswanathan, Puthan Veedu, Multivariate fractal interpolation functions: some approximation aspects and an associated fractal interpolation operator, *Electron. Trans. Numer. Anal.* 55 (2022), 627–651.
24. Selvamuthu, Dharmaraja, Tardelli, Paola, Infinite-server systems with Hawkes arrivals and Hawkes services, *Queueing Syst.* 101 (3-4) (2022), 329–351.
25. Sharma, Nitu, Dharmaraja, Selvaraju, N. S., Variable annuities valuation under a mixed fractional Brownian motion environment with jumps considering mortality risk, *Applied Stochastic Models in Business and Industry*, 38(6) (2022), 1019–1038.
26. Rajasudha, R., Arumuganathan, R., Dharmaraja, S., Performance Analysis of Discrete-time GeoX /G/1 Retrial Queue with Various Vacation Policies and Impatient Customers, *RAIRO - Operations Research*, 56 (2022), 1089–1117.
27. Dharmaraja, S. Aggarwal, Anisha, Sudhesh, R., Analysis of Energy Saving in User Equipment in LTE-A using Stochastic Modelling, *Telecommunication Systems*, 80 (2022) 123 - 140.
28. Sudhesh, R., Mohammed Shapique, A., Dharmaraja, S., Analysis of a multiple M/M/1/DV queueing system with a dual-threshold policy, vacation interruption and a waiting server, *Bulletin of the Iranian Mathematical Society*, 48 (2022), 3561–3591.
29. Sudhesh, R., Mohammed Shapique, A., Dharmaraja, S, Analysis of a dual-stage vacation queueing system with disaster and repairable server, *Methodology and Computing in Applied Probability*, 24 (2022), 2485–2508.
30. Viswanathan, P. V., A brief exposition of the space of relatively bounded nonlinear operators, *Real Anal. Exchange* 47 (1) (2022), 121–134.
31. Kumar, Deepak, Rădulescu, Vicențiu D., Sreenadh, Konijeti, Unbalanced fractional elliptic problems with exponential nonlinearity: subcritical and critical cases, *Topol. Methods Nonlinear Anal.* 59 (1) (2022), 277–302.
32. Giacomoni, Jacques, Kumar, Deepak, Sreenadh, Konijeti, A note on the global regularity results for strongly nonhomogeneous p, q -fractional problems and applications. *C. R. Math. Acad. Sci. Paris* 360 (2022), 809–817.
33. Verma, Shaily, Fu, Hung-Lin, Panda, B. S., Adjacent vertex distinguishing total coloring in split graphs, *Discrete Math.* 345 (11) (2022), Paper No. 113061, 11 pp.
34. Mittal, Gaurav, Sharma, Rajendra Kumar, Computation of Wedderburn decomposition of groups algebras from their subalgebra. *Bull. Korean Math. Soc.* 59 (3) (2022), 781–787.

35. Dasgupta, Aparajita, Kumar, Vishvesh, Ellipticity and Fredholmness of pseudo-differential operators on $\ell_2(\mathbb{Z}^n)$, Proc. Amer. Math. Soc. 150 (7) (2022), 2849–2860.
36. An, Xin, Majee, Ananta K., Prohl, Andreas, Tran, Thanh, Optimal control for a coupled spin-polarized current and magnetization system, Adv. Comput. Math. 48 (3) (2022), Paper No. 28, 40 pp.
37. Baghel, Mohit Kumar, Gillis, Nicolas, Sharma, Punit, On the non-symmetric semidefinite Procrustes problem, Linear Algebra Appl. 648 (2022), 133–159.
38. Berchio, Elvise, Ganguly, Debdeep, Roychowdhury, Prasun, Hardy-Rellich and second order Poincaré identities on the hyperbolic space via Bessel pairs, Calc. Var. Partial Differential Equations 61 (4) (2022), Paper No. 130, 24 pp.
39. Prajapati, Anshul, Sharma, Punit, Estimation of structured distances to singularity for matrix pencils with symmetry structures: a linear algebra-based approach, SIAM J. Matrix Anal. Appl. 43 (2) (2022), 740–763.
40. Goel, Divya, Rădulescu, Vicențiu D., Sreenadh, Konijeti, Variational framework and Lewy-Stampacchia type estimates for nonlocal operators on Heisenberg group, Ann. Fenn. Math. 47 (2022), no. 2, 707–721.
41. Khandelwal, Rohit, Porwal, Kamana, Pointwise a posteriori error analysis of quadratic finite element method for the elliptic obstacle problem, J. Comput. Appl. Math. 412 (2022), Paper No. 114364, 16 pp.
42. Majee, Ananta K., Prohl, Andreas, A posteriori error estimation and space-time adaptivity for a linear stochastic PDE with additive noise, IMA J. Numer. Anal. 42 (2) (2022), 1526–1567.
43. Bansal, Pooja, Mehra, Aparna, Malmquist-Luenberger productivity indexes for dynamic network DEA with undesirable outputs and negative data, RAIRO Oper. Res. 56 (2) (2022), 649–687.
44. Prajapati, Anshul, Sharma, Punit, Optimizing the Rayleigh quotient with symmetric constraints and its application to perturbations of structured polynomial eigenvalue problems, Linear Algebra Appl. 645 (2022), 256–277.
45. Mittal, Gaurav, Sharma, R. K., Unit group of semisimple group algebras of some non-metabelian groups of order 120, Asian-Eur. J. Math. 15 (3) (2022), Paper No. 2250059, 11 pp.

46. Gupta, Lipsy, Kundu, Subiman, Cauchy-subregular functions vis-à-vis different types of continuity, *Topology Appl.* 312 (2022), Paper No. 108088, 15 pp.
47. Sehgal, Ruchika, Mehra, Aparna Applying regression techniques in designing optimal trade execution strategy for an asset, *Optimization* 71 (3) (2022), 463–484.
48. Khandelwal, Rohit, Porwal, Kamana, Pointwise a posteriori error analysis of a finite element method for the Signorini problem, *J. Sci. Comput.* 91 (2) (2022), Paper No. 42, 34 pp.
49. Patel, Shiv Prakash, Singla, Pooja, A multiplicity one theorem for groups of type An over discrete valuation rings, *Proc. Amer. Math. Soc.* 150 (6) (2022), 2309–2322.
50. Biswas, Biswarup, Kumar, Harish, Bhoriya, Deepak, Entropy stable discontinuous Galerkin schemes for the special relativistic hydrodynamics equations, *Comput. Math. Appl.* 112 (2022), 55–75.
51. Lal, Rattan, Kumar, N. Shraavan, Amenability and Orlicz Figà-Talamanca Herz algebras, *J. Aust. Math. Soc.* 112 (2) (2022), 218–229.
52. Nagar, Anima, Revisiting variations in topological transitivity, *Eur. J. Math.* 8 (2022), no. 1, 369–387.
53. Sharma, Rajendra K., Mittal, Gaurav, On the unit group of a semisimple group algebra $F_q\text{SL}(2, Z_5)$, *Math. Bohem.* 147 (1) (2022), 1–10.
54. Viswanathan, P. V., A revisit to smoothness preserving fractal perturbation of a bivariate function: self-referential counterpart to bicubic splines, *Chaos Solitons Fractals* 157 (2022), Paper No. 111885, 8 pp.
55. Bansal, Pooja, Mehra, Aparna, Integrated dynamic interval data envelopment analysis in the presence of integer and negative data, *Journal of Industrial Manag. Optim.* 18 (2) (2022), 1339–1363.
56. Varagapriya, V., Singh, Vikas Vikram, Lisser, Abdel, Constrained Markov decision processes with uncertain costs, *Oper. Research Letters* 50 (2) (2022), 218–223.
57. Majee, Sudeb, Jain, Subit K., Ray, Rajendra K., Majee, Ananta Kumar, A fuzzy edge detector driven telegraph total variation model for image despeckling, *Inverse Problems and Imaging* 16 (2) (2022), 367–396.
58. Dasgupta, Aparajita, Ruzhansky, Michael, Tushir, Abhilash, Discrete time-dependent wave equations I Semiclassical analysis, *J. Differential Equations* 317 (2022), 89–120.

59. Panda, B. S., Priyamvada, Complexity and algorithms for neighbor-sum-2-distinguishing $\{1,3\}$ -edge-weighting of graphs, *Theoretical Comput. Sci.* 906 (2022), 32–51.
60. Kumar, Sanjay, Lohia, Dipti, Pratap, Darsh, Krishna, Ashutosh, Panda, B. S., MDER: modified degree with exclusion ratio algorithm for influence maximisation in social networks, *Computing* 104 (2) (2022), 359–382.
61. Kumar, Akhilesh, Gupta, Anjana, Mehra, Aparna, A bilevel game model for ascertaining competitive target prices for a buyer in negotiation with multiple suppliers, *RAIRO Oper. Res.* 56 (1) (2022), 293–330.
62. Dileep, A., Moondra, Jai, Tripathi, Amitabha, New proofs for the disjunctive Rado number of the equations $x_1-x_2=a$ and $x_1-x_2=b$, *Graphs Combin.* 38 (2) (2022), 10 pp.
63. Gaddam, Sharat, Gudi, Thirupathi, Porwal, Kamana, Two new approaches for solving elliptic obstacle problems using discontinuous Galerkin methods, *BIT* 62 (1) (2022), 89–124.
64. Chandra Sekhara Rao, S., Chaturvedi, Abhay Kumar, Analysis of an almost fourth-order parameter-uniformly convergent numerical method for singularly perturbed semilinear reaction-diffusion system with non-smooth source term, *Appl. Math. Comput.* 421 (2022), Paper No. 126944, 26 pp.
65. Cao, Yixin, Rai, Ashutosh, Sandeep, R. B., Ye, Junjie, A polynomial kernel for diamond-free editing, *Algorithmica* 84 (1) (2022), 197–215.
66. Bertolin, Cristiana, Philippon, Patrice, Saha, Biswajyoti, Saha, Ekata, Semi-abelian analogues of Schanuel conjecture and applications, *J. Algebra* 596 (2022), 250–288.
67. Rao, S. Chandra Sekhara, Chaturvedi, Abhay Kumar, Analysis and implementation of a computational technique for a coupled system of two singularly perturbed parabolic semilinear reaction-diffusion equations having discontinuous source terms. *Commun. Nonlinear Sci. Numer. Simul.* 108 (2022), Paper No. 106232, 34 pp.
68. Nagar, Anima, Characterization of quasifactors, *J. Fixed Point Theory Appl.* 24 (1) (2022), Paper No. 12, 17 pp.
69. Rawat, S., Sreenadh, K., Three solutions for a fractional elliptic problem with asymmetric critical Choquard nonlinearity, *Differential Integral Equations* 35 (1-2) (2022), 89–121.
70. Giacomoni, Jacques, Kumar, Deepak, Sreenadh, Konijeti, Global regularity results for non-homogeneous growth fractional problems, *J. Geom. Anal.* 32 (1) (2022), Paper No. 36, 41 pp.

71. Sahai, Meena, Kumari, Parvesh, Sharma, R. K, Presentations of general linear groups with Jordan regular generators, *Palest. J. Math.* 11 (1) (2022), 162–175.
72. Dasgupta, Aparajita, Nayak, Santosh Kumar, Pseudo-differential operators, Wigner transform and Weyl transform on the Similitude group $SIM(2)$, *Bull. Sci. Math.* 174 (2022), Paper No. 103087, 25 pp.
73. Saha, Biswajyoti, Multiple Stieltjes constants and Laurent type expansion of the multiple zeta functions at integer points, *Selecta Math. (N.S.)* 28 (1) (2022), Paper No. 6, 41 pp.
74. Khan, Imran, Gupta, Anjana, Mehra, Aparna, 2-Tuple unbalanced linguistic multiple-criteria group decision-making using prospect theory data envelopment analysis, *Soft Computing* 26 (2022), 6317–6332.
75. Bansal, Pooja, Kumar, Sunil, Mehra, Aparna, Gulati, Rachita, Developing two dynamic Malmquist Luenberger productivity indices: an illustrative application for assessing productivity performance of Indian Banks, *Omega* 107 (2022), 102538, 19pp.
76. Srivastava, Shweta, Aggarwal, Abha, Mehra, Aparna, Portfolio selection by cumulative prospect theory and its comparison with mean-variance model, *Granular Computing* 7 (2022), 903–916.
77. Bansal, Pooja, Mehra, Aparna, Kumar, Sunil, Dynamic metafrontier Malmquist–Luenberger productivity index in network DEA: An application to banking data, *Computational Economics* 59 (1) (2022), 297-324.
78. Aggarwal, Raksha, Chatterjee, Niladri, VoteSumm: A Multi-Document Summarization Scheme Using Influential Nodes of Multilayer Weighted Sentence Network, *IETE Technical Review*, (2022), 1-14.
79. Kumar, S., Kumar, A, Panda, B. S., Identifying influential nodes for smart enterprises using community structure with Integrated Feature Ranking, *IEEE Transactions on Industrial Informatics* 19 (1) (2022), 703-711.
80. S. Kumar, A. Mallik, A. Khetrapal, B S Panda, Influence maximization in social networks using graph embedding and graph neural network, *Information Sciences*, 607 (2022), 1617-1636.
81. Kushwaha, Seema, Sarma, Ritumoni, Farey-subgraphs and continued fractions, *Studia Sci. Math. Hungar.*, 59 (2) (2022), 164–182.
82. Meng, Xiangrui, Sagar, Vidya, Sarma, Ritumoni, Codes with low-dimensional hull, *International Journal of Information and Coding Theory*, 6 (1) (2022), 71- 86.

83. de Dios, Blanca Ayuso, Gudi, Thitupathi, Porwal, Kamana, Pointwise a posteriori error analysis of a discontinuous Galerkin method for the elliptic obstacle problem, *IMA Journal of Numerical Analysis* (2022) 00, 1–36, <https://doi.org/10.1093/imanum/drac046>
84. Arora, Shraddha, Saxena, Abhay, Chatterjee, Niladri, Efficient Grasp: A Scalable and Modular Solution to Robotic Grasping Applications Using Vision, *Computer Integrated Manufacturing Systems* 28 (10) (2022), 906–936.
85. Jha, Alok Nikhil, Kumar, Ajay, Tiwari, Geetam, Chatterjee, Niladri, Identification and Analysis Of Offenders Causing Hit and Run Accidents Using Classification Algorithms, *International Journal of Injury Control and Safety Promotion* 29(3) (2022), 360-371.
86. Chatterjee, Niladri, Agarwal, Raksha, Studying the Effect of Syntactic Simplification on Text Summarization, *IETE Technical Review*. Taylor and Francis (2022), pp 1 -12. DOI: 10.1080/02564602.2022.2055670
87. Chen Q, Allot A, Leaman R, Islamaj R, Du J, Fang L, Wang K, Xu S, Zhang Y, Bagherzadeh P, Bergler S, Bhatnagar A, Bhavsar N, Chang YC, Lin SJ, Tang W, Zhang H, Tavchioski I, Pollak S, Tian S, Zhang J, Otmakhova Y, Yepes AJ, Dong H, Wu H, Dufour R, Labrak Y, Chatterjee N, Tandon K, Laleye FAA, Rakotoson L, Chersoni E, Gu J, Friedrich A, Pujari SC, Chizhikova M, Sivadasan N, Vg S, Lu Z. Multi-label classification for biomedical literature: an overview of the BioCreative VII LitCovid Track for COVID-19 literature topic annotations. *Database (Oxford)*. (2022), pp 1-13, doi: 10.1093/database/baac069. PMID: 36043400; PMCID: PMC9428574.
88. Agarwal, Raksha, Chatterjee, Niladri, Query-focused Multi-Document Text Summarization using Fuzzy Inference, *Journal of Intelligent and Fuzzy Systems* 42(5) (2022), 4641–4652.
89. Tandon, Kushagri, Chatterjee, Niladri, Multi-label Text Classification with an Ensemble Feature Space, *Journal of Intelligent and Fuzzy Systems* 42(5) (2022), 4425-4436.
90. V Varagapriya, Vikas Vikram Singh, Abdel Lisser, Joint chance-constrained Markov decision processes, *Annals of Operations Research*, 2022. <https://doi.org/10.1007/s10479-022-05025-3>

Conference and workshop proceedings

1. Niladri Chatterjee, Aadyant Khatri, Raksha Agarwal, Summarization of Long Input Texts Using Multi-Layer Neural Network, Conference Proceedings of The Workshop on Automatic Summarization for Creative Writing, 2022, 13-18.
2. Agarwal, Raksha, Gupta, Sharut, Chatterjee, Niladri, Profiling Fake News Spreaders on Twitter: A Clickbait and Linguistic Feature Based Scheme. NLDB 2022, LNCS 13286, 345–357, 2022. https://doi.org/10.1007/978-3-031-08473-7_32.
3. Tandon, Kushagri, Chatterjee, Niladri, Binary and Multi-label Classification of PCL using Fine-tuned Transformer-based Models. Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022), 421 - 431, 2022.
<https://aclanthology.org/2022.semeval-1.57/>
4. Sikdar, A., Chatterjee, Niladri, An Improved Bayesian TRIE Based Model for SMS Text Normalization. In: Arai, K. (eds) Intelligent Computing. SAI 2022. Lecture Notes in Networks and Systems, vol 507, 579-593, Springer, 2022.
https://doi.org/10.1007/978-3-031-10464-0_39
5. De, Minati, Jain, S. Jain, Kallepalli, S. V., Singh, Satyam, Online Piercing of Geometric Objects, 42nd Foundations of Software Technology and Theoretical Computer Science, 7:1--17, 2022. <https://doi.org/10.4230/LIPIcs.FSTTCS.2022.17>.
6. De, Minati, Singh, Satyam, Hitting Geometric Objects Online via Points in Z^d , 28th International Conference on Computing and Combinatorics, {COCOON}, 537-548 https://doi.org/10.1007/978-3-031-22105-7_48.
7. Vladimir Vishnevsky, Dharmaraja Selvamuthu, Vladimir Rykov, Dmitry Kozyrev, Nika Ivanova, Reliability modeling of a flight module of a tethered high-altitude telecommunication platform, Proceedings of International Conference on Information, Control, and Communication Technologies (ICCT), October 3-7, 2022, Astrakhan, Russia, <https://doi.org/10.1109/ICCT56057.2022.9976764>

8. Dharmaraja, Selvamuthu, Jain, Vidyottama, Raj, Raina, Performance Analysis for Tethered HAP Systems: An Analytical Approach, 25th International Conference on Distributed Computer and Communication Networks: Control, Computation, Communications, 26-30 September 2022, Moscow, Russia. pp. 205 - 217, 2022.
9. Jain, Vidyottama, Vladimir Vishnevsky, Dharmaraja Selvamuthu, Raj, Raina, Analysis of Power Management in a Tethered High Altitude Platform using MAP/PH[3]/1 Retrial Queueing Model, 25th International Conference on Distributed Computer and Communication Networks: Control, Computation, Communications, 26-30 September 2022, Moscow, Russia. pp. 218 - 230, 2022.
10. Dharmaraja, S., Anisha, Neerasa, Kamalesh, Analytical Modelling and Simulation of DRX Mechanism for Energy Harvesting, Proceedings of Reliability and Maintainability Symposium (RAMS) in Tucson AZ, USA (January 24-27, 2022), pp. 1-5, 2022.
11. Golovach, P.A., Panolan, F., Rai, Ashutosh, Saurabh, S. (2022). Parameterized Complexity of Set-Restricted Disjoint Paths on Chordal Graphs. In: Kulikov, A.S., Raskhodnikova, S. (eds) Computer Science – Theory and Applications. CSR 2022. Lecture Notes in Computer Science, vol 13296. Springer, https://doi.org/10.1007/978-3-031-09574-0_10.
12. Legrand-Duchesne, Clément, Rai, Ashutosh, Tancer, Martin Parameterized complexity of untangling knots. 49th EATCS International Conference on Automata, Languages, and Programming, Art. No. 88, 17 pp., LIPIcs. Leibniz Int. Proc. Inform., 229, Schloss Dagstuhl. Leibniz-Zent. Inform., Wadern, 2022.