

Faculty Publications

- 2023 [*A rising tide of parasite transcriptomics propels pathogen biology*](#) PLoS Biol. 2023 Jan 25;21(1):e3001997 (2023) -- Duraisingh MT, Gubbels MJ, **Zarrinhalam** K. doi: 10.1371/journal.pbio.3001997
- [*Babesia divergens egress from host cells is orchestrated by essential and druggable kinases and proteases*](#) Res Sq [Preprint]. 2023 Feb 28;rs.3.rs-2553721 (2023) -- Elsworth B, Keroack C, Rezvani Y, Paul A, Barazorda K, Tennesen J, Sack S, Moreira C, Gubbels MJ, Meyers M, **Zarrinhalam** K, Duraisingh M. doi: 10.21203/rs.3.rs-2553721/v1
- 2022 [*Almost existence from the feral perspective and some questions*](#) Ergodic Theory Dynam. Systems 42 (2022), no. 2, 792–834 (2022) – **Fish**, Joel W. ; Hofer, Helmut H. W. doi: 10.1017/etds.2021.20
- Quantum Kirwan for quantum K-theory* Facets of algebraic geometry. Vol. I, 265–332, London Math. Soc. Lecture Note Ser., 472, Cambridge Univ. Press, Cambridge, 2022 (2022) – **González**, E. ; Woodward, C.
- [*A gauche perspective on row reduced echelon form and its uniqueness*](#) Amer. Math. Monthly 129 (2022), no. 4, 364–373 (2022) – **Grinberg**, Eric L. doi: 10.1080/00029890.2022.2027717
- Nilpotents leave no trace: a matrix mystery for pandemic times* J. Humanist. Math. 12 (2022), no. 1, 139–147 (2022) - **Grinberg**, Eric L.
- [*Catching an infinitely fast robber on a gri*](#) Discrete Appl. Math. 320 (2022), 446–461 (2022) -- Kinnersley, William B. ; **Townsend**, Nikolas doi: 10.1016/j.dam.2022.06.022
- [*Symplectic flexibility and the Grothendieck group of the Fukaya category*](#) J. Topol. 15 (2022), no. 1, 204–237 (2022) - **Lazarev**, Oleg doi: 10.1112/topo.12217
- [*Markov-switching state-space models with applications to neuroimaging*](#) Comput. Statist. Data Anal. 174 (2022), Paper No. 107525, 23 pp (2022) – **Degras**, David ; Ting, Chee-Ming ; Ombao, Hernando doi: 10.1016/j.csda.2022.107525
- [*Deep learning trained on hematoxylin and eosin tumor region of Interest predicts HER2 status and trastuzumab treatment response in HER2+ breast cancer.*](#) Mod Pathol. 2022 Jan;35(1):44-51 (2022) -- Farahmand S, Fernandez AI, Ahmed FS, Rimm DL, Chuang JH, Reisenbichler E, **Zarrinhalam** K. doi: 10.1038/s41379-021-00911-w
- [*Comparative single-cell transcriptional atlases of Babesia species reveal conserved and species-specific expression profiles*](#) PLoS Biol. 2022 Sep 22;20(9):e3001816 (2022) -- Rezvani Y, Keroack CD, Elsworth B, Arriojas A, Gubbels MJ, Duraisingh MT, **Zarrinhalam** K. doi: 10.1371/journal.pbio.3001816
- [*Increased AR expression in castration-resistant prostate cancer rapidly induces AR signaling reprogramming with the collaboration of EZH2*](#) Front Oncol. 2022 Nov 3;12:1021845 (2022) -- Labaf M, Li M, Ting L, Karno B, Zhang S, Gao S, Patalano S, Macoska JA, **Zarrinhalam** K, Han D, Cai C. doi: 10.3389/fonc.2022.1021845
- [*High-Resolution Small RNAs Landscape Provides Insights into Alkane Adaptation in the Marine Alkane-Degrader Alcanivorax dieselolei B-5*](#) Int J Mol Sci. 2022 Dec 15;23(24):15995 (2022) – Wei G, Li S, Ye S, Wang Z, **Zarrinhalam** K, He J, Wang W, Shao Z. doi: 10.3390/ijms232415995
- 2021 [*Balance weighing: variations on a theme*](#) Math. Mag. 94 (2021), no. 5, 339–352 (2021) – Bolker, Ethan D. ; Feuer, Samuel A. ; **Zara**, Catalin doi: 10.1080/0025570X.2021.1979369

- 2021
(continued) [Global surfaces of section in the planar restricted 3-body problem](#) Arch. Ration. Mech. Anal. 204 (2012), no. 1, 273–284 (2021) – Albers, Peter ; **Fish**, Joel W. ; Frauenfelder, Urs ; Hofer, Helmut ; van Koert, Otto doi: 10.1007/s00205-011-0475-2
- [A scrapbook of inadmissible line complexes for the X-ray transform](#) Adv. in Appl. Math. 126 (2021), Paper No. 102028, 17 pp (2021) – **Grinberg**, Eric ; Orhon, Mehmet doi: 10.1016/j.aam.2020.102028
- [Morley trisectors and the law of sines with reflections](#) Amer. Math. Monthly 128 (2021), no. 2, 163–167 (2021) - **Grinberg**, Eric L. ; Orhon, Mehmet doi: 10.1080/00029890.2021.1845559
- [Sign signatures and characters of Weyl Groups](#) Adv. in Appl. Math. 130 (2021), Paper No. 102225, 73 pp (2021) – Folz-Donahue, Thomas ; **Jackson**, Steven Glenn ; Milev, Todor ; **Noel**, Alfred G. doi: 10.1016/j.aam.2021.102225
- [On representations of Clifford algebras of ternary cubic forms](#) New trends in noncommutative algebra, 91–99, Contemp. Math., 562, Amer. Math. Soc., Providence, RI, 2012 (2021) – Coskun, Emre ; Kulkarni, Rajesh S. ; **Mustopa**, Yusuf doi: 10.1090/conm/562/11132
- [Algebraic methods for tensor data](#) SIAM J. Appl. Algebra Geom. 5 (2021), no. 1, 1–27 (2021) – **Tokcan**, Neriman ; Gryak, Jonathan ; Najarian, Kayvan ; Derksen, Harm doi: 10.1137/19M1272494
- [A log PSS morphism with applications to Lagrangian embeddings](#) J. Topol. 14 (2021), no. 1, 291–368 (2021) – Ganatra, Sheel ; **Pomerleano**, Daniel doi: 10.1112/topo.12183
- [Sparse group fused lasso for model segmentation: a hybrid approach](#) Adv. Data Anal. Classif. 15 (2021), no. 3, 625–671 (2021) – **Degras**, David doi: 10.1007/s11634-020-00424-5
- [The Modular Circuitry of Apicomplexan Cell Division Plasticity](#) Front Cell Infect Microbiol. 2021 Apr 12;11:670049 (2021) – Gubbels MJ, Coppens I, **Zarringhalam** K, Duraisingh MT, Engelberg K. doi: 10.3389/fcimb.2021.670049
- [Susceptibility-Associated Genetic Variation in NEDD9 Contributes to Prostate Cancer Initiation and Progression](#) Cancer Res. 2021 Jul 15;81(14):3766-3776 (2021) – Han D, Owiredo JN, Healy BM, Li M, Labaf M, Steinfeld JS, Patalano S, Gao S, Liu M, Macoska JA, **Zarringhalam** K, Siegfried KR, Yuan X, Rebbeck TR, Cai C. doi: 10.1158/0008-5472.CAN-20-3042
- [Vitamin A deficiency affects gene expression in the Drosophila melanogaster head](#) G3 (Bethesda). 2021 Oct 19;11(11):jkab297 (2021) – Dewett D, Labaf M, Lam-Kamath K, **Zarringhalam** K, Rister J. doi: 10.1093/g3journal/jkab297
- [The Extracellular Milieu of Toxoplasma's Lytic Cycle Drives Lab Adaptation, Primarily by Transcriptional Reprogramming](#) mSystems. 2021 Dec 21;6(6):e0119621 (2021) – Primo VA Jr, Rezvani Y, Farrell A, Murphy CQ, Lou J, Vajdi A, Marth GT, **Zarringhalam** K, Gubbels MJ. doi: 10.1128/mSystems.01196-21
- [Deep learning and alignment of spatially resolved single-cell transcriptomes with Tangram](#) Nat Methods. 2021 Nov;18(11):1352-1362 (2021) – Biancalani T, Scalia G, Buffoni L, Avasthi R, Lu Z, Sanger A, **Tokcan** N, Vanderburg CR, Segerstolpe √Ö, Zhang M, Avraham-Davidi I, Vickovic S, Nitzan M, Ma S, Subramanian A, Lipinski M, Buenrostro J, Brown NB, Fanelli D, Zhuang X, Macosko EZ, Regev A. doi: 10.1038/s41592-021-01264-7
- [Multimodal tensor-based method for integrative and continuous patient monitoring during postoperative cardiac care](#) Artif Intell Med. 2021 Mar;113:102032 (2021) – Hernandez L, Kim R, **Tokcan** N, Derksen H, Biesterveld BE, Croteau A, Williams AM, Mathis M, Najarian K, Gryak J. doi: 10.1016/j.artmed.2021.102032

Beyond cohomological assignments Adv. Math. 363 (2020), 106976, 21 pp (2020) – Guillemin, Victor ; Tolman, Susan ; **Zara**, Catalin doi: 10.1016/j.aim.2020.106976

Exhaustive Gromov compactness for pseudoholomorphic curves Some aspects of the theory of dynamical systems: a tribute to Jean-Christophe Yoccoz. Vol. I. Astérisque 2020, no. 415, 87–112. ISBN: 978-2-85629-916-6 () – 2020 doi: 10.24033/ast

Admissible complexes for the projective X-ray transform over a finite field Discrete Comput. Geom. 64 (2020), no. 1, 28–36 (2020) – Feldman, David V. ; **Grinberg**, Eric L. doi: 10.1007/s00454-020-00207-x

Four-dimensional reflection groups and electrostatics Ann. Physics 421 (2020), 168291, 23 pp (2020) – Olshanii, Maxim ; Styrkas, Yuri ; Yampolsky, Dmitry ; Dunjko, Vanja ; **Jackson**, Steven G. doi: 10.1016/j.aop.2020.168291

Incidence geometry in a Weyl chamber II: SL_n Adv. in Appl. Math. 119 (2020), 102049, 67 pp (2020) – Esole, Mboyo ; **Jackson**, Steven Glenn ; Jagadeesan, Ravi ; **Noël**, Alfred G. doi: 10.1016/j.aam.2020.102049

Incidence geometry in a Weyl chamber I: GL_n Adv. in Appl. Math. 119 (2020), 102048, 30 pp (2020) – Esole, Mboyo ; **Jackson**, Steven Glenn ; Jagadeesan, Ravi ; **Noël**, Alfred G. doi: 10.1016/j.aam.2020.102048

Continuous CM-regularity of semihomogeneous vector bundles Adv. Geom. 20 (2020), no. 3, 401–412 (2020) – Küronya, Alex ; **Mustopa**, Yusuf doi: 10.1515/advgeom-2019-0011

Evolution of cooperation in social dilemmas with assortative interactions Games 11 (2020), no. 4, Paper No. 41, 31 pp (2020) – Iyer, Swami ; **Killingback**, Timothy doi: 10.3390/g11040041

Simplifying Weinstein Morse functions Geom. Topol. 24 (2020), no. 5, 2603–2646 (2020) – **Lazarev**, Oleg doi: 10.2140/gt.2020.24.2603

H-principles for regular Lagrangians J. Symplectic Geom. 18 (2020), no. 4, 1071–1090 (2020) – **Lazarev**, Oleg doi: 10.4310/JSG.2020.v18.n4.a4

Maximal contact and symplectic structures J. Topol. 13 (2020), no. 3, 1058–1083 (2020) – **Lazarev**, Oleg doi: 10.1112/topo.12149

Flexible Lagrangians Int. Math. Res. Not. IMRN 2020, no. 8, 2408–2435 (2020) – Eliashberg, Yakov ; Ganatra, Sheel ; **Lazarev**, Oleg doi: 10.1093/imrn/rny078

Contact manifolds with flexible fillings Geom. Funct. Anal. 30 (2020), no. 1, 188–254 (2020) – **Lazarev**, Oleg doi: 10.1007/s00039-020-00524-6

Equivariant Hodge theory and noncommutative geometry Geom. Topol. 24 (2020), no. 5, 2361–2433 (2020) – Halpern-Leistner, Daniel ; **Pomerleano**, Daniel doi: 10.2140/gt.2020.24.2361

Symplectic cohomology rings of affine varieties in the topological limit Geom. Funct. Anal. 30 (2020), no. 2, 334–456 (2020) – Ganatra, Sheel ; **Pomerleano**, Daniel doi: 10.1007/s00039-020-00529-1

- 2020
(continued) *New edge asymptotics of skew Young diagrams via free boundaries* Sém. Lothar. Combin. 82B (2020), Art. 34, 11 pp (2020) – Betea, Dan ; Bouttier, Jérémie ; Nejjar, Peter ; **Vuletic**, Mirjana
- Deep learning-based cross-classifications reveal conserved spatial behaviors within tumor histological images.* Nat Commun. 2020 Dec 11;11(1):6367. (2020) -- Noorbakhsh J, Farahmand S, Foroughi Pour A, Namburi S, Caruana D, Rimm D, Soltanieh-Ha M, **Zarringhalam** K, Chuang JH. doi: 10.1038/s41467-020-20030-5
- Patch-DCA: improved protein interface prediction by utilizing structural information and clustering DCA scores* Bioinformatics. 2020 Mar 1;36(5):1460-1467 (2020) -- Vajdi A, **Zarringhalam** K, Haspel N. doi: 10.1093/bioinformatics/btz791
- A text mining system for extracting mode of regulation of transcription factor-gene regulatory interaction* J Biomed Inform. 2020 Feb;102:103353 (2020) -- Farahmand S, Riley T, **Zarringhalam** K. doi: 10.1016/j.jbi.2019.103353
- 2019 *Quantum cohomology and toric minimal model programs* Adv. Math. 353 (2019), 591–646 (2019) -- **González**, Eduardo ; Woodward, Chris T. doi: 10.1016/j.aim.2019.07.004
- Newton polytopes in algebraic combinatorics* Selecta Math. (N.S.) 25 (2019), no. 5, Paper No. 66, 37 pp (2019) – Monical, Cara ; **Tokcan**, Neriman ; Yong, Alexander doi: 10.1007/s00029-019-0513-8
- On the homological algebra of relative symplectic geometry* Primitive forms and related subjects – Kavli IPMU 2014, 327–355, Adv. Stud. Pure Math., 83, Math. Soc. Japan, [Tokyo], [2019] (2019) -- **Pomerleano**, Daniel
- Torsion contact forms in three dimensions have two or infinitely many Reeb orbits* Geom. Topol. 23 (2019), no. 7, 3601–3645 (2019) – Cristofaro-Gardiner, Dan ; Hutchings, Michael ; **Pomerleano**, Daniel doi: 10.2140/gt.2019.23.3601
- A Free Energy Based Approach for Distance Metric Learning* KDD. 2019 Jul;2019:5-13 (2019) -- **Inaba** S, Fakhry CT, Kulkarni RV, **Zarringhalam** K. doi: 10.1145/3292500.3330975
- Causal Inference Engine: a platform for directional gene set enrichment analysis and inference of active transcriptional regulators* Nucleic Acids Res. 2019 Dec 16;47(22):11563-11573 (2019) -- Farahmand S, O'Connor C, Macoska JA, **Zarringhalam** K. doi: 10.1093/nar/gkz1046
- 2018 *Connected sums and finite energy foliations I: Contact connected sums* J. Symplectic Geom. 16 (2018), no. 6, 1639–1748 (2018) -- **Fish**, Joel W. ; Siefring, Richard doi: 10.4310/JSG.2018.v16.n6.a4
- Stable gauged maps* Algebraic geometry: Salt Lake City 2015, 243–275, Proc. Sympos. Pure Math., 97.1, Amer. Math. Soc., Providence, RI, 2018 () -- 2018 doi: 10.1016/j.jalgebra.2017.06.015
- Comparing volumes by concurrent cross-sections of complex lines: a Busemann-Petty type problem* Positivity 22 (2018), no. 5, 1297–1301 (2018) -- **Grinberg**, Eric L. doi: 10.1007/s11117-018-0575-4
- Creating entanglement using integrals of motion* Phys. Rev. A 97 (2018), no. 1, 013630, 5 pp (2018) -- Olshanii, Maxim ; Scoquart, Thibault ; Yampolsky, Dmitry ; Dunjko, Vanja ; **Jackson**, Steven Glenn doi: 10.1103/physreva.97.013630
- Extension of a proof of the Ramanujan congruences for multipartitions* Ramanujan J. 45 (2018), no. 1, 1–20 (2018) - **Lazarev**, Oleg ; Mizuhara, Matthew S. ; Reid, Benjamin ; Swisher, Holly doi: 10.1007/s11139-016-9817-x

- 2018
(continued) [Online principal component analysis in high dimension: which algorithm to choose?](#) Int. Stat. Rev. 86 (2018), no. 1, 29–50 (2018) – Cardot, Hervé ; **Degras**, David doi: 10.1111/insr.12220
- [The free boundary Schur process and applications I](#) Ann. Henri Poincaré © 19 (2018), no. 12, 3663–3742 (2018) – Betea, Dan ; Bouttier, Jérémie ; Nejjar, Peter ; **Vuletic**, Mirjana doi: 10.1007/s00023-018-0723-1
- [Perfect sampling algorithms for Schur processes](#) Markov Process. Related Fields 24 (2018), no. 3, 381–418 (2018) – Betea, D. ; Boutillier, C. ; Bouttier, J. ; Chapuy, G. ; Corteel, S. ; **Vuletic**, M.
- [On the faithfulness of the representation of \$GL\(n\)\$ on the space of curvature tensors](#) Involve 11 (2018), no. 5, 775–785. (2018) – Dunn, Corey ; Elderfield, Darien ; **Martin-Hagemeyer**, Rory doi: 10.2140/involve.2018.11.775
- [Bioinformatic Approach for Prediction of CsrA/RsmA-Regulating Small RNAs in Bacteria](#) Methods Mol Biol. 2018;1737:47-56 (2018) – Fakhry CT, **Zarringhalam** K, Kulkarni RV. doi: 10.1007/978-1-4939-7634-8_3
- [Robust phenotype prediction from gene expression data using differential shrinkage of co-regulated genes](#) Sci Rep. 2018 Jan 19;8(1):1237 (2018) – **Zarringhalam** K, **Degras** D, Brockel C, Ziemek D. doi: 10.1038/s41598-018-19635-0
- [Stochastic Modeling of Gene Regulation by Noncoding Small RNAs in the Strong Interaction Limit](#) Biophys J. 2018 Jun 5;114(11):2530-2539 (2018) – Kumar N, **Zarringhalam** K, Kulkarni RV. doi: 10.1016/j.bpj.2018.04.044
- 2017 [Seidel elements and potential functions of holomorphic disc counting](#) Tohoku Math. J. (2) 69 (2017), no. 3, 327–368 (2017) – **González**, Eduardo ; Iritani, Hiroshi doi: 10.2748/tmj/1505181621
- [Properness for scaled gauged maps](#) J. Algebra 490 (2017), 104–157 (2017) – **González**, Eduardo ; Solis, Pablo ; Woodward, Chris T. doi: 10.1016/j.jalgebra.2017.06.015
- [On the kernel of the maximal flat Radon transform on symmetric spaces of compact type](#) J. Lie Theory 27 (2017), no. 3, 623–636 (2017) – **Grinberg**, Eric L. ; **Jackson**, Steven Glenn
- [An introduction to lazy cops and robbers on graphs](#) College Math. J. 48 (2017), no. 5, 322–333 (2017) – Sullivan, Brendan W. ; **Townsend**, Nikolas ; Werzanski, Mikayla L. doi: 10.4169/college.math.j.48.5.322
- [Vector bundles whose restriction to a linear section is Ulrich](#) Math. Z. 287 (2017), no. 3-4, 1307–1326 (2017) – Kulkarni, Rajesh S. ; **Mustopa**, Yusuf ; Shipman, Ian doi: 10.1007/s00209-017-1869-0
- [A few questions about curves on surfaces](#) Rend. Circ. Mat. Palermo (2) 66 (2017), no. 2, 195–204 (2017) – Ciliberto, Ciro ; Knutsen, Andreas Leopold ; Lesieutre, John ; Lozovanu, Victor ; Miranda, Rick ; **Mustopa**, Yusuf ; Testa, Damiano doi: 10.1007/s12215-016-0284-4
- [The characteristic polynomial of an algebra and representations](#) Linear Algebra Appl. 530 (2017), 47–56 (2017) – Kulkarni, Rajesh S. ; **Mustopa**, Yusuf ; Shipman, Ian doi: 10.1016/j.laa.2017.05.001
- [Ulrich sheaves and higher-rank Brill-Noether theory](#) J. Algebra 474 (2017), 166–179 (2017) – Kulkarni, Rajesh S. ; **Mustopa**, Yusuf ; Shipman, Ian doi: 10.1016/j.jalgebra.2016.10.006

- 2017
(continued) *Binary forms with three different relative ranks* Proc. Amer. Math. Soc. 145 (2017), no. 12, 5169–5177 (2017) – Reznick, Bruce ; **Tokcan**, Neriman doi: 10.1090/proc/13666
- On the Waring rank of binary forms* Linear Algebra Appl. 524 (2017), 250–262 (2017) – **Tokcan**, Neriman doi: 10.1016/j.laa.2017.03.007
- Simultaneous confidence bands for the mean of functional data* Wiley Interdiscip. Rev. Comput. Stat. 9 (2017), no. 3, e1397, 15 pp (2017) – **Degras**, David doi: 10.1002/wics.1397
- The free boundary Schur process and applications* Sv@m. Lothar. Combin. 78B (2017), Art. 44, 12 pp (2017) – Betea, Dan ; Bouttier, Jérémie ; Nejjar, Peter ; **Vuletic**, Mirjana
- Weak Cayley table groups III: PSL(2,q)* Comm. Algebra 45 (2017), no. 7, 3110–3136 (2017) – Humphries, Stephen P. ; **Nguyen**, Long doi: 10.1080/00927872.2016.1236114
- Identification of competing endogenous RNAs of the tumor suppressor gene PTEN: A probabilistic approach* Sci Rep. 2017 Aug 10;7(1):7755 (2017) – **Zarringhalam** K, Tay Y, Kulkarni P, Bester AC, Pandolfi PP, Kulkarni RV. doi: 10.1038/s41598-017-08209-1
- A biological network-based regularized artificial neural network model for robust phenotype prediction from gene expression data* BMC Bioinformatics. 2017 Dec 19;18(1):565 (2017) – Kang T, Ding W, Zhang L, Ziemek D, **Zarringhalam** K. doi: 10.1186/s12859-017-1984-2
- Prediction of bacterial small RNAs in the RsmA (CsrA) and ToxT pathways: a machine learning approach* BMC Genomics. 2017 Aug 22;18(1):645 (2017) – Fakhry CT, Kulkarni P, Chen P, Kulkarni R, **Zarringhalam** K. doi: 10.1186/s12864-017-4057-z
- Emergence of local synchronization in neuronal networks with adaptive couplings*. PLoS One. 2017 Jun 2;12(6):e0178975 (2017) – Chakravartula S, Indic P, Sundaram B, **Killingback** T. doi: 10.1371/journal.pone.0178975
- 2016 *Tolerance distances on minimal coverings* 2016 IEEE 46th International Symposium on Multiple-Valued Logic, 25–130, IEEE Computer Soc., Los Alamitos, CA, 2016 (2016) – **Zara**, Catalin ; Simovici, Dan A. doi: 10.1109/ISMVL.2016.13
- The Prouhet-Tarry-Escott problem and generalized Thue-Morse sequences* J. Comb. 7 (2016), no. 1, 117–133 (2016) – Bolker, Ethan D. ; Offner, Carl ; Richman, Robert ; **Zara**, Catalin doi: 10.4310/JOC.2016.v7.n1.a5
- Polyfolds: a first and second look* EMS Surv. Math. Sci. 3 (2016), no. 2, 131–208 (2016) – Fabert, Oliver ; **Fish**, Joel W. ; Golovko, Roman ; Wehrheim, Katrin doi: 10.4171/EMSS/16
- Evolutionary dynamics of a smoothed war of attrition game* J. Theoret. Biol. 396 (2016), 25–41 (2016) – Iyer, Swami ; **Killingback**, Timothy doi: 10.1016/j.jtbi.2016.02.014
- Lagrangian torus fibrations and homological mirror symmetry for the conifold* Comm. Math. Phys. 341 (2016), no. 1, 135–178 (2016) – Chan, Kwokwai ; **Pomerleano**, Daniel ; Ueda, Kazushi doi: 10.1007/s00220-015-2477-7
- The geometry of loop spaces II: characteristic classes* Adv. Math. 287 (2016), 485–518 (2016) – Maeda, Yoshiaki ; Rosenberg, Steven ; **Torres-Ardila**, Fabián doi: 10.1016/j.aim.2015.10.001

- 2016
(continued) *Interpreting transcriptional changes using causal graphs: new methods and their practical utility on public networks* BMC Bioinformatics. 2016 Aug 24;17(1):318 (2016) -- Fakhry CT, Choudhary P, Gutteridge A, Sidders B, Chen P, Ziemek D, **Zarringhalam** K. doi: 10.1186/s12859-016-1181-8
- Frequency modulation of stochastic gene expression bursts by strongly interacting small RNAs* Phys Rev E. 2016 Oct;94(4-1):042419 (2016) -- Kumar N, Jia T, **Zarringhalam** K, Kulkarni RV. doi: 10.1103/PhysRevE.94.042419
- Pressure dependency of localization degree in heavy fermion Celn3: A density functional theory analysis* Sci Rep. 2016 Aug 24;6:31734 (2016) -- Yazdani-Kachoei M, Jalali-Asadabadi S, Ahmad I, **Zarringhalam** K. doi: 10.1038/srep31734
- A general benevolence dimension that links neural, psychological, economic, and life-span data on altruistic tendencies* J Exp Psychol Gen. 2016 Oct;145(10):1351-1358. (2016) -- Hubbard J, Harbaugh WT, Srivastava S, **Degras** D, Mayr U. doi: 10.1037/xge0000209
- Evolution of Cooperation in Social Dilemmas on Complex Networks* PLoS Comput Biol. 2016 Feb 29;12(2):e1004779 (2016) -- Iyer S, **Killingback** T. doi: 10.1371/journal.pcbi.1004779
- 2015 *Maass waveforms and low-lying zeros* Analytic number theory, 19–55, Springer, Cham, 2015 (2015) -- Alpoge, Levent ; Amersi, Nadine ; Iyer, Geoffrey ; **Lazarev**, Oleg ; Miller, Steven J. ; Zhang, Liyang
- Corrigendum to Equivariant string and leading order characteristic classes associated to fibrations'* J. Geom. Phys. 98 (2015), 607 (2015) -- Larraín-Hubach, Andrés ; Maeda, Yoshiaki ; Rosenberg, Steven ; **Torres-Ardila**, Fabián doi: 10.1016/j.geomphys.2015.08.003
- The geometry of loop spaces I: Hs-Riemannian metrics* Internat. J. Math. 26 (2015), no. 4, 1540002, 26 pp (2015) -- Maeda, Yoshiaki ; Rosenberg, Steven ; **Torres-Ardila**, Fabián doi: 10.1142/S0129167X15400029
- Weak Cayley table groups II: alternating groups and finite Coxeter groups* Comm. Algebra 43 (2015), no. 11, 4763–4782 (2015) -- Humphries, Stephen P. ; **Nguyen**, Long doi: 10.1080/00927872.2014.952733
- The importance of delineating networks by activity type in bottlenose dolphins (Tursiops truncatus) in Cedar Key, Florida* R Soc Open Sci. 2015 Mar 11;2(3):140263 (2015) -- Gazda S, Iyer S, **Killingback** T, Connor R, Brault S. doi: 10.1098/rsos.140263
- 2014 *Polynomial assignments* Indag. Math. (N.S.) 25 (2014), no. 5, 992–1018 (2014) -- Guillemin, Victor ; Sabatini, Silvia ; **Zara**, Catalin doi: 10.1016/j.indag.2014.07.008
- Finding and counting MSTD sets* Combinatorial and additive number theory CANT 2011 and 2012, 79–98, Springer Proc. Math. Stat., 101, Springer, New York, 2014 (2014) -- Iyer, Geoffrey ; **Lazarev**, Oleg ; Miller, Steven J. ; Zhang, Liyang doi: 10.1007/978-1-4939-1601-6_7
- Local polynomial estimation of the mean function and its derivatives based on functional data and regular designs* ESAIM Probab. Stat. 18 (2014), 881–899 (2014) -- Benhenni, Karim ; **Degras**, David doi: 10.1051/ps/2014009
- Rotation sampling for functional data* Statist. Sinica 24 (2014), no. 3, 1075–1095 (2014) -- **Degras**, David
- Categorical Lagrangian Grassmannians and Brauer-Picard groups of pointed fusion categories* J. Algebra 411 (2014), 191–214 (2014) -- Nikshych, Dmitri ; **Riepel**, Brianna doi: 10.1016/j.jalgebra.2014.04.013

- 2014
(continued) [Equivariant, string and leading order characteristic classes associated to fibrations](#) J. Geom. Phys. 79 (2014), 34–52 (2014) – Larraín-Hubach, Andrés ; Maeda, Yoshiaki ; Rosenberg, Steven ; **Torres-Ardila**, Fabián doi: 10.1016/j.geomphys.2014.01.011
- [Conifold transitions via affine geometry and mirror symmetry](#) Geom. Topol. 18 (2014), no. 3, 1769–1863 (2014) - **Castañó-Bernard**, Ricardo ; Matessi, Diego doi: 10.2140/gt.2014.18.1769
- [Robust clinical outcome prediction based on Bayesian analysis of transcriptional profiles and prior causal networks](#) Bioinformatics. 2014 Jun 15;30(12):i69-77 (2014) – **Zarringhalam** K, Enayetallah A, Reddy P, Ziemek D. doi: 10.1093/bioinformatics/btu272
- [A hierarchical model for simultaneous detection and estimation in multi-subject fMRI studies](#) Neuroimage. 2014 Sep;98:61-72 (2014) – **Degras** D, Lindquist MA. doi: 10.1016/j.neuroimage.2014.04.052
- [An application of evolutionary game theory to social dilemmas: the traveler's dilemma and the minimum effort coordination game](#) PLoS One. 2014 Apr 7;9(4):e93988 (2014) – Iyer S, Reyes J, **Killingback** T. doi: 10.1371/journal.pone.0093988
- [Evolutionary dynamics of the traveler's dilemma and minimum-effort coordination games on complex networks](#) Phys Rev E Stat Nonlin Soft Matter Phys. 2014 Oct;90(4):042134 (2014) – Iyer S, **Killingback** T. doi: 10.1103/PhysRevE.90.042134
- 2013
- [Balanced fiber bundles and GKM theory](#) Int. Math. Res. Not. IMRN 2013, no. 17, 3886–3910 (2013) – Guillemin, Victor ; Sabatini, Silvia ; **Zara**, Catalin doi: 10.1093/imrn/rns168
- [Equivariant K-theory of GKM bundles](#) Ann. Global Anal. Geom. 43 (2013), no. 1, 31–45 (2013) – Guillemin, Victor ; Sabatini, Silvia ; **Zara**, Catalin doi: 10.1007/s10455-012-9331-3
- [The Conley-Zehnder indices of the rotating Kepler problem](#) Math. Proc. Cambridge Philos. Soc. 154 (2013), no. 2, 243–260 (2013) – Albers, Peter ; **Fish**, Joel W. ; Frauenfelder, Urs ; van Koert, Otto doi: 10.1017/S0305004112000515
- [Gauged Gromov-Witten theory for small spheres](#) Math. Z. 273 (2013), no. 1-2, 485–514 (2013) – **González**, Eduardo ; Woodward, Chris doi: 10.1007/s00209-012-1016-x
- [Stability of syzygy bundles on an algebraic surface](#) Math. Res. Lett. 20 (2013), no. 1, 73–80 (2013) – Ein, Lawrence ; Lazarsfeld, Robert ; **Mustopa**, Yusuf doi: 10.4310/MRL.2013.v20.n1.a7
- [The geometry of Ulrich bundles on del Pezzo surfaces](#) J. Algebra 375 (2013), 280–301 (2013) – Coskun, Emre ; Kulkarni, Rajesh S. ; **Mustopa**, Yusuf doi: 10.1016/j.jalgebra.2012.08.032
- [A comment on 'Towards a rigorous framework for studying 2-player continuous games' by Shade T. Shatters](#) Journal of Theoretical Biology 321 (2013) – Doebeli, Michael ; Hauert, Christoph ; **Killingback**, Timothy doi: 10.1016/j.jtbi.2013.05.035
- [A smooth, complex generalization of the Hobby-Rice theorem](#) Indiana Univ. Math. J. 62 (2013), no. 4, 1133–1141 (2013) – **Lazarev**, Oleg ; Lieb, Elliott H. doi: 10.1512/iumj.2013.62.5062

- 2013
(continued) *Distribution of missing sums in sumsets* Exp. Math. 22 (2013), no. 2, 132–156 (2013) – **Lazarev**, Oleg ; Miller, Steven J. ; O'Bryant, Kevin doi: 10.1080/10586458.2013.743304
- Global matrix factorizations* Math. Res. Lett. 20 (2013), no. 1, 91–106 (2013) – Lin, Kevin H. ; **Pomerleano**, Daniel doi: 10.4310/MRL.2013.v20.n1.a9
- Confidence bands for Horvitz-Thompson estimators using sampled noisy functional data* Bernoulli 19 (2013), no. 5A, 2067–2097 (2013) – Cardot, Hervé ; **Degras**, David ; Josserand, Etienne doi: 10.3150/12-BEJ443
- The Gaussian free field and strict plane partitions* 25th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2013), 1041–1052, Discrete Math. Theor. Comput. Sci. Proc., AS, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2013 (2013) – **Vuletic**, Mirjana
- Attack robustness and centrality of complex networks* PLoS One. 2013;8(4):e59613 (2013) – Iyer S, **Killingback** T, Sundaram B, Wang Z. doi: 10.1371/journal.pone.0059613
- Spatial heterogeneity promotes coexistence of rock-paper-scissors metacommunities* Theor Popul Biol. 2013 Jun;86:1-11 (2013) – Schreiber SJ, **Killingback** TP. doi: 10.1016/j.tpb.2013.02.004
- Competitively coupled maps and spatial pattern formation* Phys Rev E Stat Nonlin Soft Matter Phys. 2013 Feb;87(2):022902 (2013) – **Killingback** T, Loftus G, Sundaram B. doi: 10.1103/PhysRevE.87.022902
- 2012 *Cohomology of GKM fiber bundles* J. Algebraic Combin. 35 (2012), no. 1, 19–59 (2012) – Guillemin, Victor ; Sabatini, Silvia ; **Zara**, Catalin doi: 10.1007/s10801-011-0292-6
- Seidel elements and mirror transformations* Selecta Math. (N.S.) 18 (2012), no. 3, 557–590 (2012) – **González**, Eduardo ; Iritani, Hiroshi doi: 10.1007/s00029-011-0080-0
- The admissibility theorem for the spatial X-ray transform over the two-element field* The mathematical legacy of Leon Ehrenpreis, 111–123, Springer Proc. Math., 16, Springer, Milan, 2012 (2012) – **Grinberg**, Eric L. doi: 10.1007/978-88-470-1947-8_8
- Deconvolution for the Pompeiu problem on the Heisenberg group, I* The mathematical legacy of Leon Ehrenpreis, 61–94, Springer Proc. Math., 16, Springer, Milan, 2012 (2012) – Chang, Der-Chen ; Eby, Wayne ; **Grinberg**, Eric doi: 10.1007/978-88-470-1947-8_6
- Pfaffian quartic surfaces and representations of Clifford algebras* Doc. Math. 17 (2012), 1003–1028 (2012) – Coskun, Emre ; Kulkarni, Rajesh S. ; **Mustopa**, Yusuf
- A combinatorial proof of a recursive formula for multipartitions* Integers 12 (2012), no. 1, 113–127 (2012) – **Lazarev**, Oleg ; Swisher, Holly doi: 10.1515/integ.2011.089
- Generalized more sums than differences sets* J. Number Theory 132 (2012), no. 5, 1054–1073 (2012) – Iyer, Geoffrey ; **Lazarev**, Oleg ; Miller, Steven J. ; Zhang, Liyang doi: 10.1016/j.jnt.2011.10.006
- Curved string topology and tangential Fukaya categories* String-Math 2011, 409–422, Proc. Sympos. Pure Math., 85, Amer. Math. Soc., Providence, RI, 2012 (2012) – **Pomerleano**, Daniel doi: 10.1090/pspum/085/1395

- 2012
(continued) [Testing for parallelism among trends in multiple time series](#) IEEE Trans. Signal Process. 60 (2012), no. 3, 1087–1097 (2012) – **Degras**, David ; Xu, Zhiwei ; Zhang, Ting ; Wu, Wei Biao doi: 10.1109/TSP.2011.2177831
- [Integrating chemical footprinting data into RNA secondary structure prediction](#) PLoS One. 2012;7(10):e45160 (2012) -
- **Zarringhalam** K, Meyer MM, Dotu I, Chuang JH, Clote P. doi: 10.1371/journal.pone.0045160
- [Statistical analysis of the processes controlling choline and ethanolamine glycerophospholipid molecular species composition](#) PLoS One. 2012;7(5):e37293 (2012) – **Zarringhalam** K, Zhang L, Kiebish MA, Yang K, Han X, Gross RW, Chuang J. doi: 10.1371/journal.pone.0037293
- [An open system for automatic home-cage behavioral analysis and its application to male and female mouse models of Huntington's disease](#) Behav Brain Res. 2012 Apr 1;229(1):216-25 (2012) – **Zarringhalam** K, Ka M, Kook YH, Terranova JI, Suh Y, King OD, Um M. doi: 10.1016/j.bbr.2012.01.015
- [Dynamics of the ethanolamine glycerophospholipid remodeling network](#) PLoS One. 2012;7(12):e50858 (2012) -- Zhang L, Díaz-Díaz N, **Zarringhalam** K, Hermansson M, Somerharju P, Chuang J. doi: 10.1371/journal.pone.0050858
- 2011 [Estimates for J-curves as submanifolds](#) Internat. J. Math. 22 (2011), no. 10, 1375–1431 (2011) -- **Fish**, Joel W. doi: 10.1142/S0129167X11007306
- [Target-local Gromov compactness](#) Geom. Topol. 15 (2011), no. 2, 765–826 (2011) -- **Fish**, Joel W. doi: 10.2140/gt.2011.15.765
- [Classifying semi-free Hamiltonian \$S^1\$ -manifolds](#) Int. Math. Res. Not. IMRN 2011, no. 2, 387–418 (2011) – **González**, Eduardo doi: 10.1093/imrn/rnq076
- [Deformations of symplectic vortices](#) Ann. Global Anal. Geom. 39 (2011), no. 1, 45–82 (2011) -- **González**, Eduardo ; Woodward, Chris doi: 10.1007/s10455-010-9223-3
- [Kernel bundles, syzygies of points, and the effective cone of \$Cg, \mathbb{A}^2\$](#) Int. Math. Res. Not. IMRN 2011, no. 6, 1417–1437 (2011) – **Mustopa**, Yusuf
- [Residuation of linear series and the effective cone of \$Cd\$](#) Amer. J. Math. 133 (2011), no. 2, 393–416 (2011) -- **Mustopa**, Yusuf doi: 10.1353/ajm.2011.0010
- [Simultaneous confidence bands for nonparametric regression with functional data](#) Statist. Sinica 21 (2011), no. 4, 1735–1765 (2011) – **Degras**, David A. doi: 10.5705/ss.2009.207
- [Characteristic classes and zeroth order pseudodifferential operators](#) Spectral theory and geometric analysis, 141–158, Contemp. Math., 535, Amer. Math. Soc., Providence, RI, 2011 (2011) -- Larrain-Hubach, Andrés ; Rosenberg, Steven ; Scott, Simon ; **Torres-Ardila**, Fabián doi: 10.1090/conm/535/10539
- [Plane overpartitions and cylindric partitions](#) J. Combin. Theory Ser. A 118 (2011), no. 4, 1239–1269 (2011) -- Corteel, Sylvie ; Savelief, Cyrille ; **Vuletic**, Mirjana doi: 10.1016/j.jcta.2010.12.001
- [Sequential adaptive compressed sampling via Huffman codes](#) Sampl. Theory Signal Image Process. 10 (2011), no. 3, 231–254 (2011) -- Aldroubi, Akram ; Wang, Haichao ; **Zarringhalam**, Kourosh

- 2010 *Positivity of equivariant Schubert classes through moment map degeneration* J. Symplectic Geom. 8 (2010), no. 4, 381–401 (2010) – **Zara**, Catalin
- The Gauss-Bonnet-Grotemeyer theorem in space forms* Inverse Probl. Imaging 4 (2010), no. 4, 655–664 (2010) -
- **Grinberg**, Eric L. ; Li, Haizhong doi: 10.3934/ipi.2010.4.655
- A statistical construction of power-law networks* Int. J. Parallel Emergent Distrib. Syst. 25 (2010), no. 3, 223–235 (2010)
– Ghadge, Shilpa ; **Killingback**, Timothy ; Sundaram, Bala ; Tran, Duc A. doi: 10.1080/17445760903429963
- The fixed point set of anti-symplectic involutions of Lagrangian fibrations* Rend. Semin. Mat. Univ. Politec. Torino 68 (2010), no. 3, 235–250 (2010) – **Castaño-Bernard**, R. ; Matessi, D.
- Symmetries of Lagrangian fibrations* Adv. Math. 225 (2010), no. 3, 1341–1386 (2010) – **Castaño-Bernard**, Ricardo ; Matessi, Diego ; Solomon, Jake P. doi: 10.1016/j.aim.2010.04.001
- Semi-global invariants of piecewise smooth Lagrangian fibrations* Q. J. Math. 61 (2010), no. 3, 291–318 (2010) -
- **Castaño-Bernard**, Ricardo ; Matessi, Diego doi: 10.1093/qmath/hap003
- 2009 *A new approach to computing generators for $U(\mathfrak{g})K$* J. Algebra 322 (2009), no. 8, 2607–2620 (2009) – **Jackson**, Steven Glenn ; **Noël**, Alfred G. doi: 10.1016/j.jalgebra.2009.07.004
- Toric degeneration of branching algebras* Adv. Math. 220 (2009), no. 6, 1809–1841 (2009) – Howe, Roger ; **Jackson**, Steven ; Lee, Soo Teck ; Tan, Eng-Chye ; Willenbring, Jeb doi: 10.1016/j.aim.2008.11.010
- Nonparametric estimation of a trend based upon sampled continuous processes* C. R. Math. Acad. Sci. Paris 347 (2009), no. 3-4, 191–194 (2009) – **Degras**, David doi: 10.1016/j.crma.2008.12.016
- A generalization of MacMahon's formula* Trans. Amer. Math. Soc. 361 (2009), no. 5, 2789–2804 (2009) – **Vuletic**, Mirjana doi: 10.1090/S0002-9947-08-04753-3
- Lagrangian 3-torus fibrations* J. Differential Geom. 81 (2009), no. 3, 483–573 (2009) – **Castaño-Bernard**, Ricardo ; Matessi, Diego
- 2008 *Algebraic connective K-theory and the niveau filtration* J. Pure Appl. Algebra 212 (2008), no. 7, 1695–1715 (2008) – **Cai**, Shuang doi: 10.1016/j.jpaa.2007.12.002
- Asymptotics for the nonparametric estimation of the mean function of a random process* Statist. Probab. Lett. 78 (2008), no. 17, 2976–2980 (2008) – **Degras**, David doi: 10.1016/j.spl.2008.05.015
- Maximal tori of reductive centralizers of nilpotents in exceptional complex symmetric spaces: a computational approach* Council for African American Researchers in the Mathematical Sciences. Vol. V, 103–139, Contemp. Math., 467, Amer. Math. Soc., Providence, RI, 2008 (2008) – **Noël**, Alfred G. doi: 10.1090/conm/467/09135
- The atlas of Lie groups and representations: scope and successes* Council for African American Researchers in the Mathematical Sciences. Vol. V, 85–101, Contemp. Math., 467, Amer. Math. Soc., Providence, RI, 2008 (2008) – **Noël**, Alfred G. doi: 10.1090/conm/467/09134

- 2008
(continued) [Generating an adaptive multiresolution image analysis with compact cupolets](#) Nonlinear Dynam. 52 (2008), no. 1-2, 51–70 (2008) – **Zarringhalam**, Kourosh ; Short, Kevin M. doi: 10.1007/s11071-007-9257-7
- 2007 [Complete Padovan sequences in finite fields](#) Fibonacci Quart. 45 (2007), no. 1, 64–75 (2007) – Gil, Juan B. ; Weiner, Michael D. ; **Zara**, Catalin
- [Morse interpolation for Hamiltonian GKM spaces](#) J. Differential Geom. 75 (2007), no. 3, 503–523 (2007) – **Zara**, Catalin
- [The four vertex theorem and its converse](#) Notices Amer. Math. Soc. 54 (2007), no. 2, 192–207 (2007) – DeTurck, Dennis ; Gluck, Herman ; **Pomerleano**, Daniel ; Vick, David Shea
- [The shifted Schur process and asymptotics of large random strict plane partitions](#) Int. Math. Res. Not. IMRN 2007, no. 14, Art. ID rnm043, 53 pp (2007) – **Vuletic**, Mirjana doi: 10.1093/imrn/rnm043
- 2006 [A GKM description of the equivariant cohomology ring of a homogeneous space](#) J. Algebraic Combin. 23 (2006), no. 1, 21–41 (2006) – Guillemain, V. ; Holm, T. ; **Zara**, C. doi: 10.1007/s10801-006-6027-4
- [Chains, subwords, and fillings: strong equivalence of three definitions of the Bruhat order](#) Electron. J. Combin. 13 (2006), no. 1, Note 5, 13 pp (2006) – **Zara**, Catalin
- [Quantum cohomology and \$S^1\$ -actions with isolated fixed points](#) Trans. Amer. Math. Soc. 358 (2006), no. 7, 2927–2948 (2006) – **González**, Eduardo doi: 10.1090/S0002-9947-06-04038-4
- [Radon inversion: from lines to Grassmannians](#) Integral geometry and convexity, 37–47, World Sci. Publ., Hackensack, NJ, 2006 (2006) – **Grinberg**, Eric L. doi: 10.1142/9789812774644_0004
- [Prehomogeneous spaces associated with nilpotent orbits in simple real Lie algebras \$E_6\(6\)\$ and \$E_6\(\mathfrak{a}_26\)\$ and their relative invariants](#) Experiment. Math. 15 (2006), no. 4, 455–469 (2006) – **Jackson**, Steven Glenn ; **Noël**, Alfred G.
- [Prehomogeneous spaces associated with real nilpotent orbits](#) J. Algebra 305 (2006), no. 1, 194–269 (2006) – **Jackson**, Steven Glenn ; **Noël**, Alfred G. doi: 10.1016/j.jalgebra.2005.09.045
- [Scale-free extinction dynamics in spatially structured host-parasitoid systems](#) J. Theoret. Biol. 241 (2006), no. 4, 745–750 (2006) – **Killingback**, Timothy ; Blok, Hendrik J. ; Doebeli, Michael doi: 10.1016/j.jtbi.2006.01.010
- [A general computational scheme for testing admissibility of nilpotent orbits of real Lie groups of inner type](#) Mathematical software, ICMS 2006, 1–11, Lecture Notes in Comput. Sci., 4151, Springer, Berlin, 2006 (2006) – **Noël**, Alfred G. doi: 10.1007/11832225_1
- [Some remarks on Richardson orbits in complex symmetric spaces](#) Math. Comp. 75 (2006), no. 253, 395–417 (2006) - **Noël**, Alfred G. doi: 10.1090/S0025-5718-05-01784-9
- [Characterization of wave front sets by wavelet transforms](#) Tohoku Math. J. (2) 58 (2006), no. 3, 369–391 (2006) – Pilipovića, Stevan ; **Vuletic**, Mirjana

- 2006
(continued) *Evolution in group-structured populations can resolve the tragedy of the commons* Proc Biol Sci. 2006 Jun 22;273(1593):1477-81 (2006) -- **Killingback** T, Bieri J, Flatt T. doi: 10.1098/rspb.2006.3476
- 2005 *Prehomogeneous spaces associated with complex nilpotent orbits* J. Algebra 289 (2005), no. 2, 515–557 (2005) -
- **Jackson**, Steven Glenn ; **Noël**, Alfred G. doi: 10.1016/j.jalgebra.2005.02.017
- Spatial models of virus-immune dynamics* J. Theoret. Biol. 233 (2005), no. 2, 221–236 (2005) -- Funk, Georg A. ; Jansen, Vincent A. A. ; Bonhoeffer, Sebastian ; **Killingback**, Timothy doi: 10.1016/j.jtbi.2004.10.004
- Convergence de l'estimateur spline cubique de lissage dans un modèle de régression longitudinale avec erreur de type processus* (French) [[Asymptotics of a smoothing cubic spline estimator in a longitudinal regression model with random process noise]] C. R. Math. Acad. Sci. Paris 340 (2005), no. 11, 851–854 (2005) -- **Degras**, David ; Jallet, Roxane doi: 10.1016/j.crma.2005.04.011
- Some piece-wise smooth Lagrangian fibrations* Rend. Semin. Mat. Univ. Politec. Torino 63 (2005), no. 3, 223–253 (2005)
-- **Castaño-Bernard**, R. ; Matessi, D.
- Spatial models of virus-immune dynamics* J Theor Biol. 2005 Mar 21;233(2):221-36 (2005) -- Funk GA, Jansen VA, Bonhoeffer S, **Killingback** T. doi: 10.1016/j.jtbi.2004.10.004
- Evolution of cooperation by generalized reciprocity* Proc Biol Sci. 2005 Jun 7;272(1568):1115-20 (2005) -- Pfeiffer T, Rutte C, **Killingback** T, Taborsky M, Bonhoeffer S. doi: 10.1098/rspb.2004.2988
- 2004 *Radon inversion on Grassmannians via Gårding-Gindikin fractional integrals* Ann. of Math. (2) 159 (2004), no. 2, 783–817 (2004) -- **Grinberg**, Eric L. ; Rubin, Boris doi: 10.4007/annals.2004.159.783
- Effects of neighbourhood size and connectivity on the spatial continuous prisoner's dilemma* J. Theoret. Biol. 231 (2004), no. 1, 97–106 (2004) -- Ifti, Margarita ; **Killingback**, Timothy ; Doebeli, Michael doi: 10.1016/j.jtbi.2004.06.003
- Computing theta-stable parabolic subalgebras using LiE* Computational science, ÅilCCS 2004. Part IV, 335–342, Lecture Notes in Comput. Sci., 3039, Springer, Berlin, 2004 (2004) -- **Noël**, Alfred G. doi: 10.1007/978-3-540-25944-2_43
- Symplectic invariants of some families of Lagrangian T3-fibrations* J. Symplectic Geom. 2 (2004), no. 3, 279–308 (2004)
-- **Castaño-Bernard**, Ricardo
- The evolutionary origin of cooperators and defectors* Science. 2004 Oct 29;306(5697):859-62 (2004) -- Doebeli M, Hauert C, **Killingback** T. doi: 10.1126/science.1101456
- 2003 *The existence of generating families for the cohomology ring of a graph* Adv. Math. 174 (2003), no. 1, 115–153 (2003) -- Guillemin, Victor ; **Zara**, Catalin doi: 10.1016/S0001-8708(02)00057-9
- Parking functions, stack-sortable permutations, and spaces of paths in the Johnson graph* Permutation patterns (Otago, 2003). Electron. J. Combin. 9 (2002/03), no. 2, Research paper 11, 11 pp (2003) -- **Zara**, Catalin
- Computing maximal tori using LiE and Mathematica* Computational science, ÅilCCS 2003. Part I, 728–736, Lecture Notes in Comput. Sci., 2657, Springer, Berlin, 2003 (2003) -- **Noël**, Alfred G. doi: 10.1007/3-540-44860-8_75

- 2003
(continued) *Optimal control of one-qubit gates* J. Phys. A 36 (2003), no. 3, 841–849 (2003) – Fonseca Romero, K. M. ; Laverde, G. Useche ; **Torres-Ardila**, F. doi: 10.1088/0305-4470/36/3/317
- Metapopulation dynamics with quasi-local competition* Theor Popul Biol. 2003 Dec;64(4):397-416 (2003) – Doebeli M, **Killingback** T. doi: 10.1016/s0040-5809(03)00106-0
- 2002 *Combinatorial formulas for products of Thom classes* Geometry, mechanics, and dynamics, 363–405, Springer, New York, 2002 (2002) – Guillemin, Victor ; **Zara**, Catalin doi: 10.1007/0-387-21791-6_12
- The continuous prisoner's dilemma and the evolution of cooperation through reciprocal altruism with variable investment* Am Nat. 2002 Oct;160(4):421-38 (2002) – **Killingback** T, Doebeli M. doi: 10.1086/342070
- 2001 *G-actions on graphs* Internat. Math. Res. Notices 2001, no. 10, 519–542 (2001) – Guillemin, V. ; **Zara**, C. doi: 10.1155/S1073792801000277
- 1-skeleta, Betti numbers, and equivariant cohomology* Duke Math. J. 107 (2001), no. 2, 283–349 (2001) – Guillemin, V. ; **Zara**, C. doi: 10.1215/S0012-7094-01-10724-2
- Analytic continuation of convex bodies and Funk's characterization of the sphere* Pacific J. Math. 201 (2001), no. 2, 309–322 (2001) – **Grinberg**, Eric L. ; Quinto, Eric Todd doi: 10.2140/pjm.2001.201.309
- Inversion of the spherical Radon transform by a Poisson type formula* Radon transforms and tomography (South Hadley, MA, 2000), 137–146, Contemp. Math., 278, Amer. Math. Soc., Providence, RI, 2001 (2001) – Pesenson, Isaac ; **Grinberg**, Eric L. doi: 10.1090/conm/278/04602
- Classification of admissible nilpotent orbits in simple real Lie algebras $E_6(6)$ and $E_6(-26)$* Represent. Theory 5 (2001), 494–502 (2001) – **Noël**, Alfred G. doi: 10.1090/S1088-4165-01-00141-8
- Classification of admissible nilpotent orbits in simple exceptional real Lie algebras of inner type* Represent. Theory 5 (2001), 455–493 (2001) – **Noël**, Alfred G. doi: 10.1090/S1088-4165-01-00141-8
- Determinant of the Dirac operator over the interval $[0, \epsilon]$* Geometric methods for quantum field theory (Villa de Leyva, 1999), 509–520, World Sci. Publ., River Edge, NJ, 2001 (2001) – **Torres-Ardila**, Fabian doi: 10.1142/9789812810571_0013
- Spatial Ultimatum Games, collaborations and the evolution of fairness* Proc Biol Sci. 2001 Sep 7;268(1478):1797-801 (2001) – **Killingback** T, Studer E. doi: 10.1098/rspb.2001.1697
- 2000 *Morera theorems for complex manifolds* J. Funct. Anal. 178 (2000), no. 1, 1–22 (2000) – **Grinberg**, Eric L. ; Quinto, Eric Todd doi: 10.1006/jfan.2000.3656
- Irregular sampling and the Radon transform* Analysis, geometry, number theory: the mathematics of Leon Ehrenpreis (Philadelphia, PA, 1998), 255–268, Contemp. Math., 251, Amer. Math. Soc., Providence, RI, 2000 (2000) – **Grinberg**, Eric ; Pesenson, Isaac doi: 10.1090/conm/251/03874
- Component groups of centralizers of nilpotents in complex symmetric spaces* J. Algebra 232 (2000), no. 1, 94–125 (2000) – King, Donald R. ; **Noël**, Alfred G. doi: 10.1006/jabr.2000.8389

- 1999 *Equivariant de Rham theory and graphs* Sir Michael Atiyah: a great mathematician of the twentieth century. Asian J. Math. 3 (1999), no. 1, 49–76 (1999) – Guillemin, V. ; **Zara**, C. doi: 10.4310/SDG.2002.v7.n1.a8
- Morera theorems for spheres through a point in $\mathbb{C}N$* Recent developments in complex analysis and computer algebra (Newark, DE, 1997), 267–275, Int. Soc. Anal. Appl. Comput., 4, Kluwer Acad. Publ., Dordrecht, 1999 (1999) – **Grinberg**, Eric Liviu ; Quinto, Eric Todd doi: 10.1007/978-1-4613-0297-1_19
- Convolutions, transforms, and convex bodies* Proc. London Math. Soc. (3) 78 (1999), no. 1, 77–115 (1999) – **Grinberg**, Eric ; Zhang, Gaoyong doi: 10.1112/S0024611599001653
- 'Raise the stakes' evolves into a defector* Nature. 1999 Aug 5;400(6744):518 (1999) – **Killingback** T, Doebeli M. doi: 10.1038/22913
- Variable investment, the Continuous Prisoner's Dilemma, and the origin of cooperation* Proc Biol Sci. 1999 Sep 7;266(1430):1723-8 (1999) – **Killingback** T, Doebeli M, Knowlton N. doi: 10.1098/rspb.1999.0838
- Evolution of cooperation in spatially structured populations* J Theor Biol. 1999 Oct 21;200(4):405-17 (1999) – Brauchli K, **Killingback** T, Doebeli M. doi: 10.1006/jtbi.1999.1000
- 1998 *A characterization of bi-invariant Riemannian metrics on Lie groups* Stud. Cerc. Mat. 50 (1998), no. 1-2, 111–115 (1998) - **Zara**, Catalin
- Nilpotent orbits and theta-stable parabolic subalgebras* Represent. Theory 2 (1998), 1–32 (1998) – **Noël**, Alfred G. doi: 10.1090/S1088-4165-98-00038-7
- Self-organized criticality in spatial evolutionary game theory* J Theor Biol. 1998 Apr 7;191(3):335-40 (1998) - **Killingback** T, Doebeli M. doi: 10.1006/jtbi.1997.0602
- 1997 *Classification of nilpotent orbits in symmetric spaces* African Americans in mathematics (Piscataway, NJ, 1996), 123–127, DIMACS Ser. Discrete Math. Theoret. Comput. Sci., 34, Amer. Math. Soc., Providence, RI, 1997 (1997) – **Noël**, Alfred G. doi: 10.1090/dimacs/034/12
- 1996 *Why do quaternionic spaces lack complex structures?* New Zealand J. Math. 25 (1996), no. 1, 23–37 (1996) – **Grinberg**, Eric L.
- 1995 *On a theorem of D. Müller* (Romanian) Stud. Cerc. Mat. 47 (1995), no. 3-4, 359–363 (1995) – **Zara**, Catalin
- 1994 *Integration over minimal spheres in Lie groups and symmetric spaces of compact type* 75 years of Radon transform (Vienna, 1992), 167–174, Conf. Proc. Lecture Notes Math. Phys., IV, Int. Press, Cambridge, MA, 1994 (1994) – **Grinberg**, Eric L.
- That kappa operator: Gel'fand-Graev-Shapiro inversion and Radon transforms on isotropic planes* Tomography, impedance imaging, and integral geometry (South Hadley, MA, 1993), 93–104, Lectures in Appl. Math., 30, Amer. Math. Soc., Providence, RI, 1994 (1994) – **Grinberg**, E. L.
- 1992 *Aspects of flat Radon transforms* Geometric analysis (Philadelphia, PA, 1991), 73–85, Contemp. Math., 140, Amer. Math. Soc., Providence, RI, 1992 (1992) – **Grinberg**, Eric L. doi: 10.1090/conm/140/1197589

- 1992
(continued) Quantization of $SL(2,R)$ Chern-Simons theory Comm. Math. Phys. 145 (1992), no. 1, 1–16 (1992) – **Killingback**, T. P.
- 1991 Isoperimetric inequalities and identities for k -dimensional cross-sections of convex bodies Math. Ann. 291 (1991), no. 1, 75–86 (1991) – **Grinberg**, Eric L. doi: 10.1007/BF01445191
- Two-dimensional topological gravity and intersection theory on the moduli space of holomorphic bundles Phys. Lett. B 260 (1991), no. 3-4, 303–310 (1991) – **Killingback**, T. P. doi: 10.1016/0370-2693(91)91616-4
- Two-dimensional topological gravity, topological matter and intersection theory on moduli space Phys. Lett. B 255 (1991), no. 4, 513–520 (1991) – **Killingback**, T. P. doi: 10.1016/0370-2693(91)90259-S
- 1990 Admissible complexes for the combinatorial Radon transform. A progress report Integral geometry and tomography (Arcata, CA, 1989), 1–3, Contemp. Math., 113, Amer. Math. Soc., Providence, RI, 1990 (1990) – Bolker, Ethan D. ; **Grinberg**, Eric ; Kung, Joseph P. S. doi: 10.1090/conm/113/1108639
- Infinitesimal aspects of the Busemann-Petty problem Bull. London Math. Soc. 22 (1990), no. 5, 478–484 (1990) -
- **Grinberg**, Eric L. ; Rivin, Igor doi: 10.1112/blms/22.5.478
- The admissibility theorem for the hyperplane transform over a finite field J. Combin. Theory Ser. A 53 (1990), no. 2, 316–320 (1990) – **Grinberg**, Eric doi: 10.1016/0097-3165(90)90063-3
- Chern-Simons theory for compact nonsemisimple Lie groups Classical Quantum Gravity 7 (1990), no. 12, 2179–2193 (1990) – **Killingback**, T. P.
- 1989 Quantum Yang-Mills theory on Riemann surfaces and conformal field theory Phys. Lett. B 223 (1989), no. 3-4, 357–364 (1989) – **Killingback**, T. P. doi: 10.1016/0370-2693(89)91616-X
- Quantum Chern-Simons theory Phys. Lett. B 219 (1989), no. 4, 448–456 (1989) – **Killingback**, T. P. doi: 10.1016/0370-2693(89)91093-9
- 1988 A boundary analogue of Morera's theorem in the unit ball of C_n Proc. Amer. Math. Soc. 102 (1988), no. 1, 114–116 (1988) – **Grinberg**, Eric L. doi: 10.2307/2046041
- Global anomalies, string theory and spacetime topology Classical Quantum Gravity 5 (1988), no. 9, 1169–1185 (1988) -
- **Killingback**, T. P.
- 1987 Euclidean Radon transforms: ranges and restrictions Integral geometry (Brunswick, Maine, 1984), 109–133, Contemp. Math., 63, Amer. Math. Soc., Providence, RI, 1987 (1987) – **Grinberg**, Eric L. doi: 10.1090/conm/063/876316
- The Dirac-Ramond operator in string theory and loop space index theorems Nonperturbative methods in field theory (Irvine, CA, 1987). Nuclear Phys. B Proc. Suppl. 1A (1987), 189–215 (1987) – Alvarez, Orlando ; **Killingback**, T. P. ; Mangano, Michelangelo ; Windey, Paul doi: 10.1016/0920-5632(87)90110-1
- String theory and loop space index theorems Comm. Math. Phys. 111 (1987), no. 1, 1–10 (1987) – Alvarez, Orlando ; **Killingback**, T. P. ; Mangano, Michelangelo ; Windey, Paul

- 1987
(continued) [World-sheet anomalies and loop geometry](#) Nuclear Phys. B 288 (1987), no. 3-4, 578–588 (1987) – **Killingback**, T. P. doi: 10.1016/0550-3213(87)90229-X
- [Global gravitational anomalies and smooth 11-manifolds](#) Classical Quantum Gravity 4 (1987), no. 3, 71–74 (1987) – **Killingback**, T. P.
- [Topology of gauge theories on compact 4-manifolds](#) Classical Quantum Gravity 4 (1987), no. 2, 357–373 (1987) - **Killingback**, T. P. ; Rees, E. G.
- [Topological sectors in superstring theory](#) Phys. Lett. B 184 (1987), no. 2-3, 197–201 (1987) – **Killingback**, T. P. doi: 10.1016/0370-2693(87)90567-3
- 1986 [Radon transforms on higher Grassmannians](#) J. Differential Geom. 24 (1986), no. 1, 53–68 (1986) – **Grinberg**, Eric L.
- 1985 [On the smoothness hypothesis in Sard's theorem](#) Amer. Math. Monthly 92 (1985), no. 10, 733–734 (1985) – **Grinberg**, Eric L. doi: 10.2307/2323231
- [On images of Radon transforms](#) Duke Math. J. 52 (1985), no. 4, 939–972 (1985) – **Grinberg**, Eric L. doi: 10.1215/S0012-7094-85-05251-2
- [Nonlinear \$\sigma\$ -models on compact Riemann surfaces](#) Comm. Math. Phys. 100 (1985), no. 4, 481–494 (1985) – **Killingback**, T. P.
- [Global aspects of fixing the gauge in the Polyakov string and Einstein gravity](#) Comm. Math. Phys. 100 (1985), no. 2, 267–277 (1985) – **Killingback**, T. P.
- [Spinc structures on manifolds](#) Classical Quantum Gravity 2 (1985), no. 4, 433–438 (1985) – **Killingback**, T. P. ; Rees, E. G.
- 1984 [The Gribov ambiguity in gauge theories on the four-torus](#) Phys. Lett. B 138 (1984), no. 1-3, 87–90 (1984) – **Killingback**, T. P. doi: 10.1016/0370-2693(84)91878-1
- 1983 [Spherical harmonics and integral geometry on projective spaces](#) Trans. Amer. Math. Soc. 279 (1983), no. 1, 187–203 (1983) – **Grinberg**, Eric L. doi: 10.2307/1999378