A Complete Bibliography of Publications in the *SIAM Journal on Mathematics of Data Science*

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254
FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org, beebe@computer.org (Internet)
WWW URL: https://www.math.utah.edu/~beebe/

18 October 2023
Version 1.08

Title word cross-reference

$2r$ [BNZ21]. 3 [BKSU22]. ℓ_0 [DHP22]. k [SGN22, Tri19]. q [Rii23]. t [LS19].

-Connectivity [Rii23]. **-NN** [Tri19]. **-SNE** [LS19]. **-Variance** [SGN22].

19 [HNP22].

Abundance [WT22]. **Accelerated** [BBG20, CC22, DL22, LLP23]. **Activation** [CP20]. **Activations** [Ver20]. **Active** [CZD+20]. **Acyclic** [LLM22]. **Adaptive** [HS22, LLRS23]. **Adaptivity** [HLRJ22]. **Admissibility** [BNS21]. **ADMM** [RSC+22]. **Adversarial** [BGS23, FWDJ23, JC23, LKA+21, WYSO20]. **Aggregated** [BSV21]. **Aggregation** [MV22]. **Algebraic** [BM20]. **Algorithm** [ANY19, AGL21, CCNP23, ZZST21, ZN22]. **Algorithmic** [JCD23, LWL20]. **Algorithms** [AG21, ABR19, BGS23, CDH+21, GPWS21, GCPT20, GH21, JB22, LLRS23, LST19, MWW22, MSK20, MOPS20, VGWS19, XSC22]. **Alignment** [LMR+20, PWB+19, RBO21]. **Alphabets** [BM22]. **Alternating** [LS23]. **Analysis** [ANY19, BGJ20, BH22, CMS20, CDH+21, CZD+20, DJRW20, GGWX21, HM21, HNP22, HLZ20, KPR+21, MGHV21, MM23, OWXZ21, Rii23]. **Anomalies** [HNP22]. **AO** [RSC+22]. **AO-ADMM** [RSC+22]. **Application** [ML19]. **Applications** [CDH+21, DH20, HFL+22, KTM20, Rii23].

Applied [CC22]. **Approach** [BSV22, HLZ22, RSC+22]. **Approximate** [Atc21, BK23]. **Approximately** [UT19]. **Approximation** [AC20, AD21, AdE22, BGJ20, BGKP19, CLM+22, DMR21, JS21, LLP23, NGBU23, PS21, SGL+20]. **Approximations** [ABC19]. **Archetypal** [OWXZ21]. **Area** [GPWS21]. **Argument** [TM20]. **armed** [SRR21]. **Arrangements** [BV19]. **Artificial** [BGJ20]. **Assess** [WWZM20]. **Asymmetric** [JCD23]. **Asymptotic** [HLZ20]. **Attack** [DHP22]. **Attacks** [CZD+20]. **Autodifferentiable** [CSAW22]. **Automatic** [HLZ22]. **Averaged** [CP20]. **Avoid** [SM20].

Backtracking [MOPS20]. **Balancing** [LMM22]. **Bandits** [SRR21, Zha22]. **Barycenter** [CC22, HMZ22]. **Barycenters** [ABA22]. **Based** [AG21, BFM+21, HFL+22, LMR+20, MRS20, Tri19]. **Bayesian** [HLZ22, MNO20]. **Belief** [WWZM20]. **Benefit** [XSC22]. **Benign** [WT22]. **between** [AD21, DB22]. **Beyond** [WYSO20]. **Bi** [HHvT22]. **Bi-Invariant** [HHvT22]. **Bias** [SRR21]. **Big** [UT19]. **Binary** [KT21, WT22]. **Biological** [CDH+21]. **Biwhitening** [LZK22]. **Black** [BGJ20]. **Blind** [CR22, SST20]. **Block** [HPG+22, PHLP19, SST20]. **Bootstrap** [ZG21]. **Bounds** [AdE22, ERK+19, MD19, WTD+21]. **Bregman** [CC22, HPG+22, MOPS20]. **Bundle** [ZG21]. **Butterfly** [ZRG23].

Capacity [Ver20]. **Case** [CMR+21, HNP22, KT21]. **Categorical** [BH22, TLFS21]. **Causal** [CDS23]. **Causality** [TLFS21]. **Centerpoints** [DH20]. **Central** [dBSLNW23]. **Centralities** [Ben19]. **Centrality** [TCTER21]. **Certificates** [CP20]. **Chain** [Atc21]. **Chains** [BFM+21, GCPT20]. **Characteristic** [GPWS21]. **Circular** [AGL21, CCNP23]. **Classification** [DHP22, GPWS21, WT22]. **Closing** [LPH+23]. **Clouds** [Tri19]. **Cluster** [ACQ23, BRZ22]. **Clustered** [SGN22]. **Clustering** [BDS21, CS19, CEH23, DM22, LM20, LS19, VGWS19]. **Coding** [ASE19, LR19]. **Coefficients** [FT20]. **Cohomology** [CW20]. **Combinations** [JB22]. **Combined** [ZYWL20]. **Communication** [CBD21, LLC22]. **Communication-Efficient** [CBD21, LLC22]. **Communications** [GIMA21]. **Communities** [ZLZ20]. **Community** [FKZ22, WWZM20]. **Compact** [HLZ22]. **Comparisons** [LST19]. **Complete** [CG19]. **Completion** [HZ21, OPAB+21, TTV19]. **Complex** [CLM+22]. **Complex-Valued** [CLM+22]. **Complexity** [ACU23, BH22, GGWX21, PWB+19, RBO21]. **Component** [CMS20, KT21]. **Components** [SBCG+19]. **Composite** [SBCG+19]. **Compressive** [LM20, ML19]. **Computation** [HMZ22, LLC22, LMXZ22]. **Computation-Optimal** [LLC22]. **Computational** [LST19]. **Compute** [ABA22]. **Concave** [MOPS20]. **Conditional** [KSS20]. **Conditioned** [BNZ21]. **Conditions** [JC23]. **Connected** [BGKP19]. **Connectivity** [Rii23]. **Considerations** [ADN+23]. **Consistency** [Cal19, OWXZ21, SRR21]. **Constrained** [BTd22, VGWS19]. **Constraining** [RSC+22]. **Constraint** [AU21, TLSV20]. **Constraints** [BLLR22]. **Construction** [BLLR22]. **Contextual** [Zha22]. **Continuous** [MRS20]. **Continuously** [GPWS21]. **Controlled** [BK23, CLT20]. **Controls** [GGWX21]. **Convergence** [BTd22, BCP22, GGWX21, GH21, LS23, LWL20, TM20, dBSLNW23]. **Convergent** [ZZST21]. **Convex** [AAR20, CS19, MOPS20, SNS21, TMTS23, TLFS21]. **Convex-Concave** [MOPS20].

Convolutional [HH23, LPH+23, ML19]. **Convolutions** [JB22]. **Cooperative** [GGWX21]. **Coordinate** [ADN+23]. **Core** [TH23, TH19]. **Core-Periphery** [TH23]. **Correct** [AG21]. **Correlated** [LMR+20]. **Costs** [dBSLNW23]. **Count** [LZK22]. **COVID** [HNP22]. **COVID-19** [HNP22]. **Crystallographic** [BE20]. **CUR** [GH22]. **Curse** [BGJ20]. **Curve** [GPWS21]. **Cut** [LM20].

D [BKSU22]. **Data** [ACL19a, ACL19b, Bac21, BSV22, Cal19, CW20, CMR+21, DH20, DYM+22, ERK+19, GPWS21, HNP22, HYFB23, Kol19, LKA+21, LMM22, PS21, Sau22, SBCG+19, SGL+20, TMTS23, Tri19, UT19, VFMS23, ZQW+19]. **Data-Dependent** [ZQW+19]. **Data-Driven** [TMTS23]. **Decentralized** [LLC22]. **Decoding** [ERK+19]. **Decomposition** [CR22, GH22, KH20, KT21, Sau22]. **Decompositions** [ARB20, MSK20]. **Deconvolution** [CR22, KZLW20]. **Deep** [AD21, AAR20, BFT23, BGJ20, BGK22, BGKP19, CLT20, EGT+21, GRS+20, LPH+23, MD19, NGBU23, PN22]. **Defense** [WYSO20]. **definite** [FADS22]. **Degree** [Cho20]. **Denoising** [Lee21]. **Density** [LC23, LMM22]. **Dependent** [CMR+21, KPR+21, ZQW+19]. **Depths** [MFM22]. **Descent** [BHX20, DB22, SM20, TMTS23]. **Design** [BM22]. **Designs** [LMR+20]. **DESTRESS** [LLC22]. **Detectability** [WWZM20]. **Detecting** [ZLZ20]. **Detection** [BRZ22, FKZ22, TH19, TH23]. **Determinantal** [FSS22]. **Determination** [HLZ22]. **Deterministic** [HZ21]. **Dictionary** [CG19]. **Difference** [DMR21, KPR+21]. **Differential** [BGJ20, MFM22]. **Differentially** [BSV22]. **Differentiation** [BCP22]. **Diffuse** [BSV21]. **Diffusion** [BK23, CDH+21, HTR+23, SBCG+19]. **Dimension** [BLLR22, BBG20, HS22]. **Dimensional** [GKBD19, HYFB23, LR19, LMM22, PS21, VFMS23]. **Dimensionality** [BGJ20, FADS22, HHV22]. **Dimensions** [Atc21, BBP23, RBO21]. **Diploid** [BKSU22]. **Directed** [BFM+21, LLM22, Rii23]. **Discovery** [DYM+22]. **Discrete** [BFT23]. **Discretizations** [BGK22]. **Dissimilarity** [HHvT22]. **Distance** [ANY19, BKSU22, DJRW20]. **Distances** [CDH+21, FILN20, LMM22]. **Distributed** [CBD21, DMR21, GIMA21]. **Distribution** [MV22, TLFS21]. **Distributional** [BH22]. **Distributions** [CLLD22, HHvT22, HN19]. **Divergence** [GH21]. **Divergences** [BDK+21]. **Diversity** [ABR19, FSS21]. **Do** [PN22]. **Domains** [AC20]. **Double** [BHX20, DB22]. **Doubly** [LCK21, LC23]. **Driven** [CP20, TMTS23]. **Dual** [CC22]. **Dynamical** [SST20, WTD+21]. **Dynamics** [CMR+21, LMXZ22].

Effectiveness [Bac21]. **Efficient** [ABR19, BGS23, BNZ21, CBD21, LLC22, NRHvBW21, SNS21, ZZST21, ZRG23]. **Eigenspace** [CBD21]. **Eigenvalues** [TCTER21]. **Eigenvector** [Ben19]. **Embedding** [FADS22]. **Embeddings** [KSS20]. **Empirical** [BGJ20, KTM20]. **End** [HLZ22]. **End-to-End** [HLZ22]. **EnResNet** [WYSO20]. **Ensemble** [CSAW22, WYSO20]. **Ensembles** [LWL20]. **Entries** [BNZ21]. **Entropic** [dBSLNW23]. **Entropy** [DDD+21]. **Equations** [BGJ20, MFM22]. **Ergodicity** [FT20]. **Erratum** [ACL19a]. **Error** [BGJ20, Li21, MD19, WTD+21, XCRW22]. **Errors** [DB22]. **Escape** [HLZ20]. **Estimates** [DMS22, LLM22]. **Estimation** [BM22, BDK+21, CBD21, HN19, WTD+21]. **Estimators** [BNS21]. **Euclidean** [BKSU22]. **Evaluation** [GPWS21, LLP23]. **Evolving** [GPWS21]. **Exact** [LMXZ22]. **Expanders**

[HZ21]. **Exponential** [CLLD22]. **Exponential-Wrapped** [CLLD22]. **Extending** [SM20]. **Extensions** [FADS22]. **Extensive** [VFMS23]. **Extraction** [CDJN21, MGHV21]. **Extrapolation** [Bac21, BTd22, HPG+22]. **Extreme** [JS21, SNS21].

Factorization [AG21, JCD23]. **Factorizations** [ZRG23]. **FANOK** [ARdE21]. **Fast** [AAR20, BSV21, BRZ22, CDH+21, LS23, ZLRY20, dBSLNW23]. **Feature** [CDJN21]. **Features** [BHX20, DYM+22]. **Feel** [Zha22]. **Feel-Good** [Zha22]. **Few** [BNZ21]. **Feynman** [WYSO20]. **Field** [GGWX21]. **Filters** [CSAW22]. **Finite** [BM22, Cal19, DMR21, HN19, LR19, LLC22]. **Finite-Dimensional** [LR19]. **Finite-Sum** [LLC22]. **Finite-Time** [DMR21]. **First** [BRZ22]. **Fixed** [BBP23, Cho20]. **Flow** [ACQ23]. **Forests** [LPH+23]. **Formalism** [WYSO20]. **Format** [MSK20]. **Formulation** [DL22]. **Framework** [MNO20, ZQW+19]. **Free** [JCD23]. **Frequency** [LMXZ22]. **Fully** [CMR+21]. **Function** [AC20, AD21, DMR21, LLP23]. **Functionals** [Tri19]. **Functions** [BV19, JS21, Lee21, NGBU23, PN22]. **Fused** [ZZST21].

Games [MRS20, YAY23]. **GAN** [BSCB22]. **Gap** [AD21, LPH+23]. **Gaps** [Atc21]. **GAT** [FWDJ23]. **GAT-GMM** [FWDJ23]. **Gaussian** [BLLR22, CR22, DHP22, FWDJ23, GKD19, GKBD19, LCK21, VFMS23, WT22]. **General** [AC20, EY22]. **Generalization** [BGJ20, DB22, HHV22, Li21, LMXZ22, XCRW22]. **Generalize** [OT22]. **Generalized** [ABN21, GH22]. **Generated** [HH23]. **Generating** [BSV22]. **Generative** [FWDJ23, HH22, JB22, JC23, LKA+21]. **Generic** [CLT20]. **Genome** [BKSU22]. **Geometric** [GKBD19]. **Geometry** [BKSU22, HTR+23, KZLW20, LC23, LMM22, OT22]. **Given** [BBG20]. **Global** [BGS23, Coo21]. **GMM** [FWDJ23]. **GNMR** [ZN22]. **Good** [Zha22]. **Gossip** [BBG20]. **Goursat** [SCF+21]. **Gradient** [AMFF19, ACQ23, CMR+21, HLRJ22, LLRS23, MRS20, MOPS20, SM20]. **Gradient-Based** [MRS20]. **Gradients** [KH20]. **Granger** [TLFS21]. **Graph** [ABARS20, ANY19, JB22, LMR+20, LLM22, Tri19, TM20, VGWS19]. **Graph-Based** [LMR+20, Tri19]. **Graphical** [ZZST21]. **Graphs** [BSV21, BFM+21, CDS23, Rii23]. **Greed** [HM21]. **Grids** [MD19]. **Group** [SV23]. **Group-Invariant** [SV23]. **Groups** [HHvT22]. **Guarantee** [BDS21]. **Guarantees** [ABN21, HMZ22, ZZS23].

Hamilton [MFM22]. **Hard** [ABA22]. **Hausdorff** [ANY19]. **Hawkes** [YLB+19]. **Hessian** [ACU23]. **Hessian-Schatten** [ACU23]. **Heterogeneous** [CW20, Lee21]. **Heteroscedastic** [HYFB23]. **Heteroskedastic** [LCK21]. **Hidden** [SBCG+19]. **Hierarchical** [ABC19]. **High** [Atc21, HYFB23, LMM22, PS21, RBO21]. **High-Dimensional** [HYFB23, LMM22, PS21]. **Higher** [FT20]. **Higher-Order** [FT20]. **Highly** [LMR+20]. **Hitting** [BFM+21]. **Holistic** [ASE19]. **Homology** [HNP22, MNO20]. **Hypergraph** [Ben19, HZ21]. **Hypergraphs** [CEH23, TH23]. **Hyperplane** [BV19, DMS22].

Identifiability [AG21, CG19]. **Identification** [EH23, GIMA21, SST20, ZRG23]. **Identifying** [BKSU22]. **Ill** [BNZ21, TTV19]. **Ill-Conditioned** [BNZ21]. **Ill-Posedness** [TTV19]. **Image** [HHK23]. **Images** [HH23]. **Imaging** [HH22]. **Immunization** [TCTER21]. **Impacts** [HN19].

Implementation [ADN+23]. **Implications** [MWW22]. **Implicit** [FSS21, EGT+21]. **Implicitly** [FSS22]. **Importance** [ZLRY20]. **Improved** [HM21, dBSLNW23]. **Improvement** [LM20]. **Inconsistency** [BBP23]. **Independent** [YAY23]. **Induced** [GCPT20]. **Inequality** [BLLR22]. **Inertial** [MOPS20]. **Inference** [LC23]. **Infinite** [Cal19]. **Information** [CW20, ERK+19]. **Information-Theoretic** [ERK+19]. **Informed** [BLG+22]. **Inhomogeneous** [HTR+23]. **Initialized** [LS23]. **Input** [TMTS23]. **Input-Convex** [TMTS23]. **Insights** [PN22]. **Instance** [KPR+21, LLP23]. **Instance-Dependent** [KPR+21]. **Instance-Optimal** [LLP23]. **Interface** [BSV21]. **Interpolation** [CLT20, Li21, RDB20, XCRW22, XSC22]. **Interpretable** [PS21]. **Intrinsic** [FILN20, HS22, ZQW+19]. **Introduction** [Kol19]. **Invariant** [ADN+23, HHvT22, SV23]. **Inverse** [HH22, HFL+22]. **ISLET** [ZLRY20]. **Isometric** [HHK23]. **Iterations** [BBG20]. **Iterative** [BNZ21].

Jacobi [BBG20, MFM22]. **Joining** [JAA+21]. **Joint** [FKZ22]. **Jointly** [DYM+22]. **Journal** [Kol19].

Kac [WYSO20]. **Kaczmarz** [HM21]. **Kalman** [CSAW22]. **Kernel** [BBP23, FSS21, HS22, LCK21, Li21, SCF+21]. **Kernels** [MV22]. **Kinds** [PN22]. **Knockoffs** [ARdE21].

Label [JB22]. **Labeled** [Cal19]. **Landmarking** [GKD19, GKBD19]. **Langevin** [CMR+21, LLRS23]. **Laplacian** [TM20]. **Laplacians** [MWW22, MM23]. **Large** [KH20]. **Large-Scale** [KH20]. **Lasso** [ABN21, ZZST21]. **Latent** [JAA+21]. **Layer** [ASE19, BGS23, GRS+20]. **Layer-Parallel** [GRS+20]. **Layered** [CP20]. **Learn** [PN22]. **Learning** [ACU23, BK23, BSV21, BH22, Cal19, CDS23, CMS20, CG19, DB22, DMR21, EGT+21, GIMA21, GGWX21, HHK23, JB22, JS21, KPR+21, LR19, LLRS23, MRS20, SV23, YAY23, Zha22, ZQW+19]. **Least** [ABC19, BNZ21, LS23]. **Lie** [HHvT22]. **Like** [NRHvBW21]. **Limit** [GCPT20, dBSLNW23]. **Limits** [Tri19]. **Line** [ZN22]. **Linear** [ANY19, ARdE21, BM22, DB22, DMR21, LLP23, LMXZ22, ML19, Ver20]. **Linear-Time** [ANY19]. **Linearly** [ZZST21]. **Lipschitz** [Cal19, CP20, NGBU23]. **Local** [CDS23, DM22, LM20, MV22]. **Location** [ZYWL20]. **Logistic** [DH20]. **Loss** [Lee21]. **Low** [ARB20, BNZ21, MSK20, SGL+20, UT19, ZLRY20, ZN22]. **Low-Rank** [ARB20, MSK20, SGL+20, ZLRY20].

Machines [JS21]. **Majorization** [HPG+22]. **Manifold** [BM20, FILN20, HHK23, HLZ20, LC23, LKA+21, LPH+23]. **Manifolds** [DL22, GKD19]. **Mapping** [HHK23]. **Maps** [LR19]. **Markov** [Atc21, BFM+21, GCPT20, MV22]. **MARL** [GGWX21]. **Matching** [CMS20]. **Mathematical** [BE20]. **Mathematics** [Kol19]. **Matrices** [BNZ21, UT19]. **Matrix** [AG21, BSV21, EY22, GH22, JCD23, LZK22, LS23, Lee21, OPAB+21, Sau22, TTV19, ZRG23, ZN22]. **Matrix-Vector** [BSV21]. **Max** [JC23]. **Maximization** [PHLP19]. **Maximum** [DDD+21, TM20]. **MCMC** [AMFF19]. **Mean** [GGWX21, KSS20]. **Mean-Field** [GGWX21]. **Means** [SRR21]. **Measure** [ABR19, MGHV21, MM23]. **Measures** [HHvT22]. **Measuring** [ACU23, LWL20]. **Memorizing** [ZQW+19]. **Memory** [SNS21, Ver20]. **Memory-Efficient** [SNS21]. **Method** [BCP22, BSCB22, TH19]. **Methods** [BM22, BSV21, CC22, DDD+21, FSS21, HS22, HLRJ22, OPAB+21, ZLZ20].

Metric [BFM+21, MM23, VGWS19]. **Metric-Constrained** [VGWS19]. **Min** [ABN21, JC23]. **Min-Max** [JC23]. **Minima** [Coo21]. **Minimax** [BM22]. **Minimization** [BGJ20, HPG+22]. **Minimum** [DJRW20, Li21]. **Mining** [Sau22]. **Mirror** [TMTS23]. **Missing** [VFMS23]. **Mixing** [Atc21]. **Mixture** [CR22, DHP22, FWDJ23, TLFS21]. **Mixtures** [HN19, WT22]. **Model** [CDJN21, DHP22, HH22, JB22, JCD23]. **Model-Free** [JCD23]. **Modelling** [VFMS23]. **Models** [AMFF19, BM22, BHX20, CR22, FWDJ23, JAA+21, LST19, PHLP19, SST20]. **Modes** [RSC+22]. **Modularity** [PHLP19, WWZM20]. **Moments** [Cho20]. **Mondrian** [OT22]. **Morphometrics** [GKBD19]. **Motzkin** [HM21]. **Moving** [ACQ23]. **MR** [LKA+21]. **MR-AN** [LKA+21]. **Multi** [ASE19, RBO21, SRR21]. **Multi-armed** [SRR21]. **Multi-Layer** [ASE19]. **Multi-Reference** [RBO21]. **Multiagent** [YAY23]. **Multiclass** [DH20]. **Multicomponent** [CW20]. **Multigraphs** [Cho20]. **Multikernel** [AU21]. **Multilayer** [BSV21, PHLP19, WWZM20]. **Multilinear** [ML19]. **Multimodal** [DYM+22, SBCG+19]. **Multiple** [ZZST21]. **Multireference** [PWB+19]. **Multitemporal** [CDH+21]. **Multivariate** [AC20, YLB+19].

Near [AC20, BK23]. **Near-Optimal** [AC20]. **Nearest** [XSC22]. **Neighbor** [JAA+21, XSC22]. **Neighborhood** [MGHV21]. **Network** [BDK+21, CP20, RDB20, Rii23, YLB+19]. **Networks** [AD21, AAR20, BGS23, BFT23, BLG+22, BGJ20, BBG20, BGK22, BGKP19, BRZ22, CLM+22, Coo21, CDH+21, CLT20, CZD+20, GRS+20, HH23, HLZ22, JC23, LKA+21, LLM22, LPH+23, LLRS23, ML19, MD19, NGBU23, NRHvBW21, PHLP19, PN22, SV23, TMTS23, TH19, Ver20, ZLZ20, ZZS23]. **Neural** [AD21, AAR20, BFT23, BLG+22, BGJ20, BDK+21, BGK22, BGKP19, CLM+22, Coo21, CLT20, CZD+20, GRS+20, HH23, HLZ22, LLM22, LLRS23, NGBU23, NRHvBW21, PN22, TMTS23, Ver20, ZZS23]. **NN** [Tri19]. **Node** [TCTER21]. **Noise** [LCK21, MV22]. **Noiseless** [BSV22]. **Noisy** [EY22, FILN20]. **Nonbacktracking** [CEH23, TCTER21]. **Nonconcave** [JC23]. **Nonconvex** [CMR+21, HLRJ22, JC23, LLC22, LLRS23, MOPS20]. **Nonconvex-Nonconcave** [JC23]. **Nonlinear** [LR19, LLM22, OPAB+21, Sau22, TH19]. **Nonsmooth** [JC23]. **Nonuniform** [CEH23]. **Norm** [Li21]. **Normal** [ZG21]. **Normal-Bundle** [ZG21]. **Normalization** [LCK21]. **Norms** [DM22]. **Note** [HH23]. **Notion** [SGN22]. **NP** [ABA22]. **NP-Hard** [ABA22]. **Numerical** [ADN+23, BGJ20].

Objects [MM23]. **Oblique** [LPH+23]. **Observations** [SST20]. **ODEs** [CLT20]. **One** [ZN22]. **One-Line** [ZN22]. **Operating** [GPWS21]. **Operator** [EY22]. **Operators** [CP20, SBCG+19]. **Optimal** [AC20, AGL21, ABC19, BGKP19, CCNP23, CC22, KPR+21, KTM20, LLC22, LLP23, ZLRY20, ZYWL20]. **Optimality** [BK23, JC23]. **Optimally** [HYFB23]. **Optimization** [ABN21, BGS23, BNS21, BRZ22, DL22, HLRJ22, HLZ20, LLC22, LST19, MOPS20, SNS21, VGWS19]. **Order** [BRZ22, CR22, FT20]. **Order-3** [CR22]. **Organisms** [BKSU22]. **Organization** [BKSU22]. **Out-of-Sample** [FADS22]. **Overcomes** [BGJ20]. **Overcomplete** [CR22]. **Overfitting** [WT22]. **Overlapping** [ZLZ20]. **Overparameterization** [XCRW22]. **Overparameterized** [Coo21, HHV22]. **Overparametrized** [JCD23].

Pairs [GH22]. **PARAFAC2** [RSC+22].

Parallel [GRS+20]. **Parameter** [HN19]. **Part** [KT21]. **Partial** [BGJ20]. **Partitioning** [HS22]. **Path** [LMM22]. **Paths** [BFT23, YAY23]. **Pattern** [MGHV21, ZQW+19]. **PCA** [HYFB23, TTV19]. **PDE** [SCF+21]. **Penalty** [ABN21]. **Performance** [BDS21, DMR21, LST19]. **Periphery** [TH23, TH19]. **Persistent** [CW20, HNP22, MNO20, MWW22]. **Phase** [BE20, RBO21, TLSV20]. **PIDE** [BGK22]. **Piggyback** [BCP22]. **Piggyback-Style** [BCP22]. **Point** [BCP22, FSS22, SNS21, ZZST21]. **Points** [BM20, SM20]. **Policy** [LLP23]. **Polynomial** [BV19, BBG20]. **Pooled** [ERK+19]. **Posedness** [TTV19]. **Positive** [FADS22, KT21]. **Positive-Semidefinite** [KT21]. **Post** [ZZS23]. **Post-training** [ZZS23]. **Powering** [ABARS20]. **Practical** [ABN21]. **Practice** [AD21, DDD+21]. **Presence** [VFMS23]. **Primal** [CC22]. **Primal-Dual** [CC22]. **Principle** [LMXZ22, TM20]. **Priori** [LLM22]. **Private** [BSV22]. **Pro** [NRHvBW21]. **Probabilistic** [VFMS23]. **Probabilities** [BFM+21]. **Problem** [BE20, EH23, MGHV21]. **Problems** [BCP22, CC22, FSS22, HH22, HFL+22, JC23, LMR+20, ZZST21]. **Procedure** [DJRW20]. **Process** [GKD19, GKBD19, OT22, VFMS23]. **Processes** [BLLR22, BK23, FSS22, FT20, YLB+19]. **Products** [BSV21]. **Programming** [FKZ22, YTF+21]. **Programs** [AdE22]. **Projection** [NRHvBW21]. **Projections** [HFL+22]. **Propagation** [JB22, WWZM20]. **Properties** [GCPT20, JS21, MWW22]. **Provable** [BLG+22, ZZS23, ZN22]. **Provably** [AG21, LS19]. **Proximal** [LST19, MOPS20, ZZST21]. **Pruning** [AAR20, BLG+22].

Q [BK23, GGWX21]. **Q-Learning** [GGWX21]. **Quadratic** [BGS23]. **Quadratic-Time** [BGS23]. **Quantitative** [CLM+22]. **Quantization** [ZZS23].

Random [BV19, BM20, Cho20, DMS22, LPH+23, MM23]. **Randomized** [HMZ22, LWL20, MSK20]. **Randomly** [LS23]. **Rank** [ARB20, BNZ21, HLZ22, LZK22, MSK20, SGL+20, UT19, ZLRY20, ZN22]. **Rankability** [ACL19a, ACL19b]. **Rates** [dBSLNW23]. **Receiver** [GPWS21]. **Recommendations** [ABR19]. **Reconstruction** [FILN20, JAA+21, LR19, YLB+19]. **Recovering** [CS19, SBCG+19]. **Recovery** [ABN21, BNZ21, ZN22]. **Rectified** [Ver20]. **Recursive** [GCPT20, GH21]. **Reduction** [BLLR22, FADS22, HHV22]. **Reference** [RBO21]. **Registration** [VFMS23]. **Regression** [ARB20, AU21, BBP23, DB22, DH20, FSS22, LMR+20, LWL20, ZLRY20]. **Regressions** [HHV22]. **Regressors** [TM20]. **Regularity** [HH23]. **Regularization** [FSS21, HHV22, JCD23, LMR+20, WT22, ZQW+19]. **Regularize** [FSS22]. **Regularized** [KTM20, LKA+21, ZZST21]. **Reinforcement** [BH22, YAY23, Zha22]. **Relating** [PHLP19]. **Relative** [ANY19]. **ReLU** [BGS23, MD19]. **Removal** [TCTER21]. **Rényi** [BDK+21]. **Representations** [BDK+21]. **Resampling** [HMZ22]. **Residual** [GRS+20]. **ResNets** [WYSO20]. **Restriction** [SM20]. **Results** [CLM+22]. **Retrieval** [BE20, TLSV20]. **Reuse** [GPWS21]. **Reveals** [LZK22]. **Richardson** [Bac21]. **Ridge** [JS21]. **Ridgeless** [BBP23]. **Riemannian** [DL22, FILN20]. **Rigidity** [TTV19]. **Rigorous** [KSS20]. **Risk** [BGJ20, SRR21]. **Robust** [DHP22, LCK21, LC23, TTV19]. **Robustness** [ABARS20]. **Role** [MGHV21]. **Rotational** [FKZ22]. **Rough** [BFT23]. **Rules** [EH23].

Saddle [BCP22, HLZ20, SM20]. **Saddle-Point** [BCP22]. **Safe** [EH23]. **Sample** [FADS22, HHvT22, PWB+19, RBO21, SRR21]. **Sampling** [AC20, ABC19, BSV22, FSS21, HM21, MV22, SNS21, Zha22]. **Satisficing** [YAY23]. **Scalable** [YTF+21]. **Scale** [KH20]. **Scaling** [LC23]. **Schatten** [ACU23]. **Scheme** [BTd22]. **Schemes** [ACU23, LR19]. **Scholes** [BGJ20]. **Science** [Bac21, Kol19]. **Scientific** [LKA+21]. **SCOTT** [ZYWL20]. **Selection** [ADN+23, DJRW20]. **Semi** [BSV21, FADS22]. **Semi-definite** [FADS22]. **Semi-supervised** [BSV21]. **Semidefinite** [FKZ22, KT21, YTF+21]. **Semiparametric** [FSS22]. **Sensing** [LM20, LS23, ML19]. **Sensitivity** [BLG+22]. **Sensitivity-Informed** [BLG+22]. **Separability** [DH20]. **Sequences** [Cho20]. **Sequential** [ABC19, BLLR22]. **Seriation** [AGL21, CCNP23]. **Series** [TLFS21]. **Sets** [HLZ20]. **Setting** [LWL20]. **Shape** [VFMS23, ZYWL20]. **Shape-Location** [ZYWL20]. **Sharp** [DMS22, ERK+19]. **Shifting** [EY22]. **Short** [KZLW20]. **Short-and-Sparse** [KZLW20]. **SIAM** [Kol19]. **Signals** [Lee21]. **Signature** [SCF+21]. **Similarity** [MGHV21]. **SIMODS** [Kol19]. **Simple** [CCNP23]. **Simplex** [AG21]. **Simplex-Structured** [AG21]. **Simplicial** [Rii23]. **Singularity** [HN19]. **Size** [SM20]. **Sketching** [ZLRY20]. **SLOPE** [EH23]. **Smooth** [DYM+22]. **SNE** [LS19]. **Soft** [ABN21]. **Soft-Min** [ABN21]. **Solution** [BNS21, SCF+21]. **Solutions** [BCP22, EH23]. **Some** [GCPT20]. **Space** [AMFF19]. **Spaces** [ABC19, CLLD22]. **Sparse** [ASE19, ARB20, ABN21, AdE22, GIMA21, KZLW20, MD19, Sau22, TLSV20, ZRG23]. **Sparsely** [BGKP19]. **Sparsity** [AG21, AU21]. **Sparsity-Based** [AG21]. **Spatial** [HNP22]. **Spatiotemporal** [HNP22, YLB+19]. **Spectral** [ABARS20, Atc21, BDS21, CEH23, DYM+22, JAA+21, TH19, WTD+21, ZLZ20]. **Speedy** [BH22]. **Spheres** [LST19]. **Spline** [NGBU23, PN22]. **Squares** [ABC19, BNZ21, LS23]. **Stability** [BFT23]. **Standard** [BCP22]. **State** [AMFF19, CDH+21]. **Statistical** [BM22, HMZ22, KTM20, MM23]. **Step** [SM20]. **Step-Size** [SM20]. **Steps** [BSCB22]. **Stochastic** [AMFF19, BNS21, CMR+21, DH20, FT20, GCPT20, GH21, HLRJ22, KH20, LCK21, LC23, LLRS23, OT22, PHLP19, SST20, YAY23]. **Stop** [ZQW+19]. **Strategies** [AC20]. **Streaming** [SGL+20]. **Streams** [CMR+21]. **Strict** [AGL21, CCNP23, HLZ20, SM20]. **Stride** [BSCB22]. **Structural** [CDS23, CZD+20]. **Structure** [WWZM20]. **Structured** [AG21, SNS21]. **Structures** [CP20, HN19]. **Studies** [HNP22]. **Style** [BCP22]. **Subspace** [CZD+20]. **Sum** [DM22, LLC22]. **Sum-of-Norms** [DM22]. **Supervised** [SV23, BSV21]. **Support** [WT22]. **Symmetric** [CLLD22]. **Symmetry** [KZLW20]. **Synchronization** [FKZ22]. **Synthesis** [DDD+21]. **Synthetic** [BSV22]. **System** [ABR19]. **System-Wide** [ABR19]. **Systems** [EY22].

Tail [DJRW20]. **Taking** [BSCB22]. **Taming** [LLRS23]. **Targeted** [TCTER21]. **Tasks** [DB22]. **Temporal** [DMR21, KPR+21]. **Temporal-Difference** [DMR21]. **Tensor** [ARB20, CR22, HZ21, HLZ22, KH20, MSK20, OPAB+21, SV23, SGL+20, ZLRY20]. **Tensors** [BV19]. **Tessellations** [DMS22]. **Test** [GPWS21]. **Texture** [DDD+21]. **Theorem** [dBSLNW23]. **Theorems** [DH20]. **Theoretic** [ERK+19]. **Theory** [AD21, BE20, DDD+21, KTM20, KSS20, PN22]. **Thompson** [Zha22]. **Three** [Ben19, GKBD19, VFMS23]. **Three-Dimensional** [GKBD19, VFMS23]. **Threshold** [BV19, DJRW20, Ver20]. **Time**

[ANY19, ARdE21, BGS23, BSCB22, DMR21, HTR+23, TLFS21]. **Time-Inhomogeneous** [HTR+23]. **Times** [Atc21]. **Topology** [HTR+23]. **Total** [ACU23]. **Tracking** [ZYWL20]. **Train** [NRHvBW21, SV23]. **Training** [BGS23, BSCB22, FWDJ23, GRS+20, HLZ22, NRHvBW21, ZZS23]. **Transfer** [CMS20, DB22]. **Transition** [RBO21]. **Transport** [CC22, CDJN21, KTM20, ZYWL20]. **Transportation** [dBSLNW23]. **Tree** [ACQ23, JAA+21]. **Trees** [CS19]. **Trigonometric** [XCRW22]. **Trimmed** [ABN21]. **Tseng** [BSCB22]. **Tucker** [ARB20, MSK20, SGL+20]. **Tukey** [MFM22]. **TUSLA** [LLRS23]. **Tverberg** [DH20]. **Two** [BGS23, BHX20, BSCB22]. **Two-Layer** [BGS23].

Uniform [Cho20, TM20]. **Unifying** [JB22]. **Unit** [Ver20]. **Universal** [CLT20, CZD+20]. **Unknown** [BM22]. **Unlabeled** [Cal19]. **Using** [ARB20, ACU23, BSV21, BBG20, GPWS21, GH21, HNP22, MD19, NGBU23, ZLZ20].

Valued [CLM+22]. **Vanishing** [MV22]. **Var** [NRHvBW21]. **Variable** [NRHvBW21]. **Variance** [SGN22]. **Variation** [ACU23]. **Variational** [BDK+21, DL22, HH22, PN22, Tri19]. **Vector** [BTd22, BSV21]. **Vectors** [WT22]. **Versions** [DM22]. **Via** [MM23, BFT23, BKSU22, CDS23, FKZ22, HLZ22, LLRS23, SNS21, WYSO20, ZLRY20].

Wasserstein [ABA22, CC22, GH21, HHK23, HFL+22, HMZ22]. **Wasserstein-Based** [HFL+22]. **Wassmap** [HHK23]. **Way** [ASE19]. **Weak** [BHX20]. **Weighted** [ABC19, HYFB23, Lee21, Li21, LLM22, XCRW22]. **Wide** [ABR19]. **Works** [HM21]. **Wrapped** [CLLD22].

X [TCTER21]. **X-Centrality** [TCTER21].

Zeros [EH23, Sau22].

References

Aghasi:2020:FCP

[AAR20] Alireza Aghasi, Afshin Abdi, and Justin Romberg. Fast convex pruning of deep neural networks. *SIAM Journal on Mathematics of Data Science*, 2(1): 158–188, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Altschuler:2022:WBN

[ABA22] Jason M. Altschuler and Enric Boix-Adserà. Wasserstein barycenters are NP-hard to compute. *SIAM Journal on Mathematics of Data Science*, 4(1):179–203, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1390062`.

Abbe:2020:GPS

[ABARS20] Emmanuel Abbe, Enric Boix-Adserà, Peter Ralli, and Colin Sandon. Graph powering and spectral robustness. *SIAM Journal on Mathematics of Data Science*, 2(1):132–157, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Arras:2019:SSO

[ABC19] Benjamin Arras, Markus Bachmayr, and Albert Cohen. Sequential sampling for optimal weighted least squares approximations in hierarchical spaces.

SIAM Journal on Mathematics of Data Science, 1(1):189–207, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Amir:2021:TLS

[ABN21] Tal Amir, Ronen Basri, and Boaz Nadler. The trimmed lasso: Sparse recovery guarantees and practical optimization by the generalized softmin penalty. *SIAM Journal on Mathematics of Data Science*, 3(3):900–929, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Antikacioglu:2019:NSW

[ABR19] Arda Antikacioglu, Tanvi Bajpai, and R. Ravi. A new system-wide diversity measure for recommendations with efficient algorithms. *SIAM Journal on Mathematics of Data Science*, 1(4):759–779, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Adcock:2020:NOS

[AC20] Ben Adcock and Juan M. Cardenas. Near-optimal sampling strategies for multivariate function approximation on general domains. *SIAM Journal on Mathematics of Data Science*, 2(3):607–630, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Anderson:2019:ERD

[ACL19a] Paul Anderson, Timothy Chartier, and Amy Langville. Erratum: The rankability of data. *SIAM Journal on Mathematics of Data Science*, 1(3): 643–646, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187. See [ACL19b].

Anderson:2019:RD

[ACL19b] Paul Anderson, Timothy Chartier, and Amy Langville. The rankability of data. *SIAM Journal on Mathematics of Data Science*, 1(1):121–143, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187. See erratum [ACL19a].

Arias-Castro:2023:MCT

[ACQ23] Ery Arias-Castro and Wanli Qiao. Moving up the cluster tree with the gradient flow. *SIAM Journal on Mathematics of Data Science*, 5(2):400–421, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1469869`.

Aziznejad:2023:MCL

[ACU23] Shayan Aziznejad, Joaquim Campos, and Michael Unser. Measuring complexity of learning schemes using Hessian-schatten total variation. *SIAM Journal on Mathematics of Data Science*, 5(2):422–445, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M147517X`.

Adcock:2021:GBT

[AD21] Ben Adcock and Nick Dexter. The gap between theory and

practice in function approximation with deep neural networks. *SIAM Journal on Mathematics of Data Science*, 3(2): 624–655, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Askari:2022:ABS

[AdE22] Armin Askari, Alexandre d'Aspremont, and Laurent El Ghaoui. Approximation bounds for sparse programs. *SIAM Journal on Mathematics of Data Science*, 4(2):514–530, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1398677`.

Archimbaud:2023:NCN

[ADN+23] Aurore Archimbaud, Zlatko Drmac, Klaus Nordhausen, Una Radojičić, and Anne Ruiz-Gazen. Numerical considerations and a new implementation for invariant coordinate selection. *SIAM Journal on Mathematics of Data Science*, 5(1):97–121, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1498759`.

Abdolali:2021:SSM

[AG21] Maryam Abdolali and Nicolas Gillis. Simplex-structured matrix factorization: Sparsity-based identifiability and provably correct algorithms. *SIAM Journal on Mathematics of Data Science*, 3(2):593–623, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Armstrong:2021:OAS

[AGL21] Santiago Armstrong, Cristóbal Guzmán, and Carlos A. Sing Long. An optimal algorithm for strict circular seriation. *SIAM Journal on Mathematics of Data Science*, 3(4):1223–1250, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Aicher:2019:SGM

[AMFF19] Christopher Aicher, Yi-An Ma, Nicholas J. Foti, and Emily B. Fox. Stochastic gradient MCMC for state space models. *SIAM Journal on Mathematics of Data Science*, 1(3):555–587, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Aksoy:2019:LTA

[ANY19] Sinan G. Aksoy, Kathleen Nowak, and Stephen J. Young. A linear-time algorithm and analysis of graph relative Hausdorff distance. *SIAM Journal on Mathematics of Data Science*, 1(4):647–666, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Ahmed:2020:TRU

[ARB20] Talal Ahmed, Haroon Raja, and Waheed U. Bajwa. Tensor regression using low-rank and sparse Tucker decompositions. *SIAM Journal on Mathematics of Data Science*, 2(4):944–966, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Askari:2021:FKL

[ARdE21] Armin Askari, Quentin Rebjock, Alexandre d'Aspremont, and Laurent El Ghaoui. FANOK: Knockoffs in linear time. *SIAM Journal on Mathematics of Data Science*, 3(3): 833–853, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Aberdam:2019:MLS

[ASE19] Aviad Aberdam, Jeremias Sulam, and Michael Elad. Multilayer sparse coding: The holistic way. *SIAM Journal on Mathematics of Data Science*, 1(1):46–77, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Atchade:2021:ASG

[Atc21] Yves F. Atchadé. Approximate spectral gaps for Markov chain mixing times in high dimensions. *SIAM Journal on Mathematics of Data Science*, 3(3): 854–872, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Aziznejad:2021:MRS

[AU21] Shayan Aziznejad and Michael Unser. Multikernel regression with sparsity constraint. *SIAM Journal on Mathematics of Data Science*, 3(1):201–224, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Bach:2021:ERE

[Bac21] Francis Bach. On the effectiveness of Richardson extrapolation in data science. *SIAM Journal on Mathematics of Data Science*, 3(4):1251–1277, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Berthier:2020:AGN

[BBG20] Raphaël Berthier, Francis Bach, and Pierre Gaillard. Accelerated gossip in networks of given dimension using Jacobi polynomial iterations. *SIAM Journal on Mathematics of Data Science*, 2(1):24–47, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Beaglehole:2023:IKR

[BBP23] Daniel Beaglehole, Mikhail Belkin, and Parthe Pandit. On the inconsistency of kernel ridgeless regression in fixed dimensions. *SIAM Journal on Mathematics of Data Science*, 5(4):854–872, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1499819`.

Bogensperger:2022:CPS

[BCP22] Lea Bogensperger, Antonin Chambolle, and Thomas Pock. Convergence of a piggyback-style method for the differentiation of solutions of standard saddle-point problems. *SIAM Journal on Mathematics of Data Science*, 4(3):1003–1030, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1455887`.

Birrell:2021:VRN

[BDK+21] Jeremiah Birrell, Paul Dupuis, Markos A. Katsoulakis, Luc Rey-Bellet, and Jie Wang. Variational representations and neural network estimation of Rényi divergences. *SIAM Journal on Mathematics of Data Science*, 3(4):1093–1116, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Boedihardjo:2021:PGS

[BDS21] March Boedihardjo, Shaofeng Deng, and Thomas Strohmer. A performance guarantee for spectral clustering. *SIAM Journal on Mathematics of Data Science*, 3(1):369–387, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Bendory:2020:TMT

[BE20] Tamir Bendory and Dan Edidin. Toward a mathematical theory of the crystallographic phase retrieval problem. *SIAM Journal on Mathematics of Data Science*, 2(3): 809–839, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Benson:2019:THE

[Ben19] Austin R. Benson. Three hypergraph eigenvector centralities. *SIAM Journal on Mathematics of Data Science*, 1(2): 293–312, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Boyd:2021:MDG

[BFM+21] Zachary M. Boyd, Nicolas Fraiman, Jeremy Marzuola, Peter J. Mucha, Braxton Osting, and Jonathan Weare. A metric on directed graphs and Markov chains based on hitting probabilities. *SIAM Journal on Mathematics of Data Science*, 3(2):467–493, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Bayer:2023:SDN

[BFT23] Christian Bayer, Peter K. Friz, and Nikolas Tapia. Stability of deep neural networks via discrete rough paths. *SIAM Journal on Mathematics of Data Science*, 5(1):50–76, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1472358`.

Berner:2020:AGE

[BGJ20] Julius Berner, Philipp Grohs, and Arnulf Jentzen. Analysis of the generalization error: Empirical risk minimization over deep artificial neural networks overcomes the curse of dimensionality in the numerical approximation of Black–Scholes partial differential equations. *SIAM Journal on Mathematics of Data Science*, 2(3):631–657, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Bohn:2022:DNN

[BGK22] Bastian Bohn, Michael Griebel, and Dinesh Kannan. Deep neural networks and PIDE discretizations. *SIAM Journal on Mathematics of Data Science*, 4(3):1145–1170, ????

2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1438554.

Bolcskei:2019:OAS

[BGKP19] Helmut Bölcskei, Philipp Grohs, Gitta Kutyniok, and Philipp Petersen. Optimal approximation with sparsely connected deep neural networks. *SIAM Journal on Mathematics of Data Science*, 1(1):8–45, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Bai:2023:EGO

[BGS23] Yatong Bai, Tanmay Gautam, and Somayeh Sojoudi. Efficient global optimization of two-layer ReLU networks: Quadratic-time algorithms and adversarial training. *SIAM Journal on Mathematics of Data Science*, 5(2):446–474, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1467134.

Bock:2022:SCD

[BH22] Markus Böck and Clemens Heitzinger. Speedy categorical distributional reinforcement learning and complexity analysis. *SIAM Journal on Mathematics of Data Science*, 4(2):675–693, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/20M1364436.

Belkin:2020:TMD

[BHX20] Mikhail Belkin, Daniel Hsu, and Ji Xu. Two models of double descent for weak features. *SIAM Journal on Mathematics of Data Science*, 2(4):1167–1180, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Bayraktar:2023:AQL

[BK23] Erhan Bayraktar and Ali Devran Kara. Approximate Q learning for controlled diffusion processes and its near optimality. *SIAM Journal on Mathematics of Data Science*, 5(3):615–638, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/22M1484201.

Belyaeva:2022:IGO

[BKSU22] Anastasiya Belyaeva, Kaie Kubjas, Lawrence J. Sun, and Caroline Uhler. Identifying 3D genome organization in diploid organisms via Euclidean distance geometry. *SIAM Journal on Mathematics of Data Science*, 4(1):204–228, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1390372.

Baykal:2022:SIP

[BLG+22] Cenk Baykal, Lucas Liebenwein, Igor Gilitschenski, Dan Feldman, and Daniela Rus. Sensitivity-informed provable pruning of neural networks. *SIAM Journal on Mathematics*

of Data Science, 4(1):26–45, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/20M1383239.

Bachoc:2022:SCD

[BLLR22] François Bachoc, Andrés F. López-Lopera, and Olivier Roustant. Sequential construction and dimension reduction of Gaussian processes under inequality constraints. *SIAM Journal on Mathematics of Data Science*, 4(2):772–800, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1407513.

Breiding:2020:RPA

[BM20] Paul Breiding and Orlando Marigliano. Random points on an algebraic manifold. *SIAM Journal on Mathematics of Data Science*, 2(3):683–704, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Behr:2022:SMM

[BM22] Merle Behr and Axel Munk. Statistical methods for minimax estimation in linear models with unknown design over finite alphabets. *SIAM Journal on Mathematics of Data Science*, 4(2):490–513, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1398860.

Basu:2021:ASE

[BNS21] Amitabh Basu, Tu Nguyen, and Ao Sun. Admissibility of solution estimators for stochastic optimization. *SIAM Journal on Mathematics of Data Science*, 3(1):31–51, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Bauch:2021:RIL

[BNZ21] Jonathan Bauch, Boaz Nadler, and Pini Zilber. Rank $2r$ iterative least squares: Efficient recovery of ill-conditioned low rank matrices from few entries. *SIAM Journal on Mathematics of Data Science*, 3(1):439–465, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Bomze:2022:FCD

[BRZ22] Immanuel M. Bomze, Francesco Rinaldi, and Damiano Zeffiro. Fast cluster detection in networks by first order optimization. *SIAM Journal on Mathematics of Data Science*, 4(1):285–305, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1408658.

Bohm:2022:TST

[BSCB22] Axel Böhm, Michael Sedlmayer, Ernö Robert Csetnek, and Radu Ioan Bot. Two steps at a time — taking GAN training in stride with Tseng's method. *SIAM Journal on Mathematics of Data Science*, 4(2):750–771, ????

2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1420939.

Bergermann:2021:SSL

[BSV21] Kai Bergermann, Martin Stoll, and Toni Volkmer. Semi-supervised learning for aggregated multilayer graphs using diffuse interface methods and fast matrix-vector products. *SIAM Journal on Mathematics of Data Science*, 3(2): 758–785, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Boedihardjo:2022:PSN

[BSV22] March Boedihardjo, Thomas Strohmer, and Roman Vershynin. Private sampling: A noiseless approach for generating differentially private synthetic data. *SIAM Journal on Mathematics of Data Science*, 4(3):1082–1115, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1449944.

Barre:2022:CCV

[BTd22] Mathieu Barré, Adrien Taylor, and Alexandre d'Aspremont. Convergence of a constrained vector extrapolation scheme. *SIAM Journal on Mathematics of Data Science*, 4 (3):979–1002, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1428030.

Baldi:2019:PTF

[BV19] Pierre Baldi and Roman Vershynin. Polynomial threshold functions, hyperplane arrangements, and random tensors. *SIAM Journal on Mathematics of Data Science*, 1(4):699–729, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Calder:2019:CLL

[Cal19] Jeff Calder. Consistency of Lipschitz learning with infinite unlabeled data and finite labeled data. *SIAM Journal on Mathematics of Data Science*, 1(4): 780–812, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Charisopoulos:2021:CED

[CBD21] Vasileios Charisopoulos, Austin R. Benson, and Anil Damle. Communication-efficient distributed eigenspace estimation. *SIAM Journal on Mathematics of Data Science*, 3(4):1067–1092, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Chambolle:2022:ABP

[CC22] Antonin Chambolle and Juan Pablo Contreras. Accelerated Bregman primal-dual methods applied to optimal transport and Wasserstein barycenter problems. *SIAM Journal on Mathematics of Data Science*, 4 (4):1369–1395, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/22M1481865.

Carmona:2023:SOA

[CCNP23] Mikhael Carmona, Victor Chepoi, Guyslain Naves, and Pascal Préa. A simple and optimal algorithm for strict circular seriation. *SIAM Journal on Mathematics of Data Science*, 5(1):201–221, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1495342`.

Cowen:2021:DSD

[CDH+21] Lenore Cowen, Kapil Devkota, Xiaozhe Hu, James M. Murphy, and Kaiyi Wu. Diffusion state distances: Multitemporal analysis, fast algorithms, and applications to biological networks. *SIAM Journal on Mathematics of Data Science*, 3(1): 142–170, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Czaja:2021:TMF

[CDJN21] Wojciech Czaja, Dong Dong, Pierre-Emmanuel Jabin, and Franck Olivier Ndjakou Njeunje. Transport model for feature extraction. *SIAM Journal on Mathematics of Data Science*, 3(1):321–341, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Chen:2023:CSL

[CDS23] Wenyu Chen, Mathias Drton, and Ali Shojaie. Causal structural learning via local graphs. *SIAM Journal on Mathematics of Data Science*, 5(2):280–305, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/20M1362796`.

Chodrow:2023:NSC

[CEH23] Philip Chodrow, Nicole Eikmeier, and Jamie Haddock. Nonbacktracking spectral clustering of nonuniform hypergraphs. *SIAM Journal on Mathematics of Data Science*, 5(2):251–279, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1494713`.

Cohen:2019:ICD

[CG19] Jeremy E. Cohen and Nicolas Gillis. Identifiability of complete dictionary learning. *SIAM Journal on Mathematics of Data Science*, 1(3):518–536, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Chodrow:2020:MUR

[Cho20] Philip S. Chodrow. Moments of uniform random multigraphs with fixed degree sequences. *SIAM Journal on Mathematics of Data Science*, 2(4):1034–1065, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Chevallier:2022:EWD

[CLLD22] Emmanuel Chevallier, Didong Li, Yulong Lu, and David Dunson. Exponential-wrapped distributions on symmetric spaces. *SIAM Journal on Mathematics of Data Science*, 4(4):1347–1368, ???? 2022. CODEN SJMDAQ. ISSN

2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1461551.

Caragea:2022:QAR

[CLM+22] Andrei Caragea, Dae Gwan Lee, Johannes Maly, Götz Pfander, and Felix Voigtlaender. Quantitative approximation results for complex-valued neural networks. *SIAM Journal on Mathematics of Data Science*, 4(2):553–580, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1429540.

Cuchiero:2020:DNN

[CLT20] Christa Cuchiero, Martin Larsson, and Josef Teichmann. Deep neural networks, generic universal interpolation, and controlled ODEs. *SIAM Journal on Mathematics of Data Science*, 2(3):901–919, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Chau:2021:SGL

[CMR+21] Ngoc Huy Chau, Éric Moulines, Miklós Rásonyi, Sotirios Sabanis, and Ying Zhang. On stochastic gradient Langevin dynamics with dependent data streams: The fully nonconvex case. *SIAM Journal on Mathematics of Data Science*, 3(3):959–986, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Clum:2020:MCA

[CMS20] Charles Clum, Dustin G. Mixon, and Theresa Scarnati. Matching component analysis for transfer learning. *SIAM Journal on Mathematics of Data Science*, 2(2):309–334, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Cooper:2021:GMO

[Coo21] Yaim Cooper. Global minima of overparameterized neural networks. *SIAM Journal on Mathematics of Data Science*, 3(2):676–691, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Combettes:2020:LCL

[CP20] Patrick L. Combettes and Jean-Christophe Pesquet. Lipschitz certificates for layered network structures driven by averaged activation operators. *SIAM Journal on Mathematics of Data Science*, 2(2):529–557, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Chen:2022:OOT

[CR22] Haolin Chen and Luis Rademacher. Overcomplete order-3 tensor decomposition, blind deconvolution, and Gaussian mixture models. *SIAM Journal on Mathematics of Data Science*, 4(1):336–361, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1399415.

Chi:2019:RTC

[CS19] Eric C. Chi and Stefan Steinerberger. Recovering trees with

convex clustering. *SIAM Journal on Mathematics of Data Science*, 1(3):383–407, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Chen:2022:AEK

[CSAW22] Yuming Chen, Daniel Sanz-Alonso, and Rebecca Willett. Autodifferentiable ensemble Kalman filters. *SIAM Journal on Mathematics of Data Science*, 4(2):801–833, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1434477`.

Cang:2020:PCD

[CW20] Zixuan Cang and Guo-Wei Wei. Persistent cohomology for data with multicomponent heterogeneous information. *SIAM Journal on Mathematics of Data Science*, 2(2):396–418, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Cui:2020:ASN

[CZD+20] Chunfeng Cui, Kaiqi Zhang, Talgat Daulbaev, Julia Gusak, Ivan Oseledets, and Zheng Zhang. Active subspace of neural networks: Structural analysis and universal attacks. *SIAM Journal on Mathematics of Data Science*, 2(4):1096–1122, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Dar:2022:DDD

[DB22] Yehuda Dar and Richard G. Baraniuk. Double double descent: On generalization errors in transfer learning between linear regression tasks. *SIAM Journal on Mathematics of Data Science*, 4(4):1447–1472, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1469559`.

delBarrio:2023:ICL

[dBSLNW23] Eustasio del Barrio, Alberto González Sanz, Jean-Michel Loubes, and Jonathan Niles-Weed. An improved central limit theorem and fast convergence rates for entropic transportation costs. *SIAM Journal on Mathematics of Data Science*, 5(3):639–669, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M149260X`.

DeBortoli:2021:MEM

[DDD+21] Valentin De Bortoli, Agnès Desolneux, Alain Durmus, Bruno Galerne, and Arthur Leclaire. Maximum entropy methods for texture synthesis: Theory and practice. *SIAM Journal on Mathematics of Data Science*, 3(1):52–82, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

DeLoera:2020:STT

[DH20] Jesus A. De Loera and Thomas Hogan. Stochastic Tverberg theorems with applications in multiclass logistic regression, separability, and centerpoints of data. *SIAM Journal on Mathematics of Data Science*,

2(4):1151–1166, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Delgosha:2022:RCU

[DHP22] Payam Delgosha, Hamed Hassani, and Ramtin Pedarsani. Robust classification under ℓ_0 attack for the Gaussian mixture model. *SIAM Journal on Mathematics of Data Science*, 4(1):362–385, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1426286`.

Drees:2020:MDP

[DJRW20] Holger Drees, Anja Janßen, Sidney I. Resnick, and Tiandong Wang. On a minimum distance procedure for threshold selection in tail analysis. *SIAM Journal on Mathematics of Data Science*, 2(1):75–102, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Duruisseaux:2022:VFA

[DL22] Valentin Duruisseaux and Melvin Leok. A variational formulation of accelerated optimization on Riemannian manifolds. *SIAM Journal on Mathematics of Data Science*, 4(2):649–674, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1395648`.

Dunlap:2022:LVS

[DM22] Alexander Dunlap and Jean-Christophe Mourrat. Local versions of sum-of-norms clustering. *SIAM Journal on Mathematics of Data Science*, 4(4):1250–1271, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1448732`.

Doan:2021:FTP

[DMR21] Thinh T. Doan, Siva Theja Maguluri, and Justin Romberg. Finite-time performance of distributed temporal-difference learning with linear function approximation. *SIAM Journal on Mathematics of Data Science*, 3(1):298–320, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Dirksen:2022:SER

[DMS22] Sjoerd Dirksen, Shahar Mendelson, and Alexander Stollenwerk. Sharp estimates on random hyperplane tessellations. *SIAM Journal on Mathematics of Data Science*, 4(4):1396–1419, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1485826`.

Dietrich:2022:SDJ

[DYM+22] Felix Dietrich, Or Yair, Rotem Mulayoff, Ronen Talmon, and Ioannis G. Kevrekidis. Spectral discovery of jointly smooth features for multimodal data. *SIAM Journal on Mathematics of Data Science*, 4(1):410–430, ???? 2022. CODEN SJMDAQ.

ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M141590X.

Ghaoui:2021:IDL

[EGT+21] Laurent El Ghaoui, Fangda Gu, Bertrand Travacca, Armin Askari, and Alicia Tsai. Implicit deep learning. *SIAM Journal on Mathematics of Data Science*, 3(3):930–958, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Elvira:2023:SRI

[EH23] Clément Elvira and Cédric Herzet. Safe rules for the identification of zeros in the solutions of the SLOPE problem. *SIAM Journal on Mathematics of Data Science*, 5(1):147–173, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1457631.

ElAlaoui:2019:DPD

[ERK+19] Ahmed El Alaoui, Aaditya Ramdas, Florent Krzakala, Lenka Zdeborová, and Michael I. Jordan. Decoding from pooled data: Sharp information-theoretic bounds. *SIAM Journal on Mathematics of Data Science*, 1(1):161–188, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Etter:2022:OSG

[EY22] Philip A. Etter and Lexing Ying. Operator shifting for general noisy matrix systems. *SIAM Journal on Mathematics of Data Science*, 4(4):1320–1346, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1416849.

Fanuel:2022:PSD

[FADS22] Michaël Fanuel, Antoine Aspeel, Jean-Charles Delvenne, and Johan A. K. Suykens. Positive semi-definite embedding for dimensionality reduction and out-of-sample extensions. *SIAM Journal on Mathematics of Data Science*, 4(1):153–178, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/20M1370653.

Fefferman:2020:RRM

[FILN20] Charles Fefferman, Sergei Ivanov, Matti Lassas, and Hariharan Narayanan. Reconstruction of a Riemannian manifold from noisy intrinsic distances. *SIAM Journal on Mathematics of Data Science*, 2(3):770–808, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Fan:2022:JCD

[FKZ22] Yifeng Fan, Yuehaw Khoo, and Zhizhen Zhao. Joint community detection and rotational synchronization via semidefinite programming. *SIAM Journal on Mathematics of Data Science*, 4(3):1052–1081, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1419702.

Fanuel:2021:DSI

[FSS21] Michael Fanuel, Joachim Schreurs, and Johan Suykens. Diversity sampling is an implicit regularization for kernel methods. *SIAM Journal on Mathematics of Data Science*, 3(1):280–297, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Fanuel:2022:DPP

[FSS22] Michaël Fanuel, Joachim Schreurs, and Johan A. K. Suykens. Determinantal point processes implicitly regularize semiparametric regression problems. *SIAM Journal on Mathematics of Data Science*, 4(3):1171–1190, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1403977`.

Fasino:2020:ECH

[FT20] Dario Fasino and Francesco Tudisco. Ergodicity coefficients for higher-order stochastic processes. *SIAM Journal on Mathematics of Data Science*, 2(3):740–769, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Farnia:2023:GGG

[FWDJ23] Farzan Farnia, William W. Wang, Subhro Das, and Ali Jadbabaie. GAT-GMM: Generative adversarial training for Gaussian mixture models. *SIAM Journal on Mathematics of Data Science*, 5(1):122–146, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1445831`.

Gupta:2020:SLP

[GCPT20] Abhishek Gupta, Hao Chen, Jianzong Pi, and Gaurav Tendolkar. Some limit properties of Markov chains induced by recursive stochastic algorithms. *SIAM Journal on Mathematics of Data Science*, 2(4):967–1003, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Gu:2021:MFC

[GGWX21] Haotian Gu, Xin Guo, Xiaoli Wei, and Renyuan Xu. Mean-field controls with Q-learning for cooperative MARL: Convergence and complexity analysis. *SIAM Journal on Mathematics of Data Science*, 3(4):1168–1196, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Gupta:2021:CRS

[GH21] Abhishek Gupta and William B. Haskell. Convergence of recursive stochastic algorithms using Wasserstein divergence. *SIAM Journal on Mathematics of Data Science*, 3(4):1141–1167, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Gidisu:2022:GCD

[GH22] Perfect Y. Gidisu and Michiel E. Hochstenbach. A generalized CUR decomposition for matrix pairs. *SIAM Journal on Mathematics of Data*

Science, 4(1):386–409, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1432119`.

Grishchenko:2021:DLS

[GIMA21] Dmitry Grishchenko, Franck Iutzeler, Jérôme Malick, and Massih-Reza Amini. Distributed learning with sparse communications by identification. *SIAM Journal on Mathematics of Data Science*, 3(2): 715–735, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Gao:2019:GPLb

[GKBD19] Tingran Gao, Shahar Z. Kovalsky, Doug M. Boyer, and Ingrid Daubechies. Gaussian process landmarking for three-dimensional geometric morphometrics. *SIAM Journal on Mathematics of Data Science*, 1(1):237–267, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Gao:2019:GPLa

[GKD19] Tingran Gao, Shahar Z. Kovalsky, and Ingrid Daubechies. Gaussian process landmarking on manifolds. *SIAM Journal on Mathematics of Data Science*, 1(1):208–236, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Gossmann:2021:TDR

[GPWS21] Alexej Gossmann, Aria Pezeshk, Yu-Ping Wang, and Berkman Sahiner. Test data reuse for the evaluation of continuously evolving classification algorithms using the area under the receiver operating characteristic curve. *SIAM Journal on Mathematics of Data Science*, 3(2):692–714, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Gunther:2020:LPT

[GRS+20] Stefanie Günther, Lars Ruthotto, Jacob B. Schroder, Eric C. Cyr, and Nicolas R. Gauger. Layer-parallel training of deep residual neural networks. *SIAM Journal on Mathematics of Data Science*, 2(1):1–23, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Heaton:2022:WBP

[HFL+22] Howard Heaton, Samy Wu Fung, Alex Tong Lin, Stanley Osher, and Wotao Yin. Wasserstein-based projections with applications to inverse problems. *SIAM Journal on Mathematics of Data Science*, 4(2):581–603, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/20M1376790`.

Habring:2022:GVM

[HH22] Andreas Habring and Martin Holler. A generative variational model for inverse problems in imaging. *SIAM Journal on Mathematics of Data Science*, 4(1):306–335, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https:`

//epubs.siam.org/doi/10.1137/21M1414978.

Habring:2023:NRI

[HH23] Andreas Habring and Martin Holler. A note on the regularity of images generated by convolutional neural networks. *SIAM Journal on Mathematics of Data Science*, 5(3):670–692, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/22M1525995.

Hamm:2023:WWI

[HHK23] Keaton Hamm, Nick Henscheid, and Shujie Kang. Wassmap: Wasserstein isometric mapping for image manifold learning. *SIAM Journal on Mathematics of Data Science*, 5(2):475–501, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/22M1490053.

Huang:2022:DRR

[HHV22] Ningyuan Teresa Huang, David W. Hogg, and Soledad Villar. Dimensionality reduction, regularization, and generalization in overparameterized regressions. *SIAM Journal on Mathematics of Data Science*, 4(1):126–152, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/20M1387821.

Hanik:2022:BID

[HHvT22] Martin Hanik, Hans-Christian Hege, and Christoph von Tycowicz. Bi-invariant dissimilarity measures for sample distributions in Lie groups. *SIAM Journal on Mathematics of Data Science*, 4(4):1223–1249, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1410373.

Horvath:2022:ASG

[HLRJ22] Samuel Horváth, Lihua Lei, Peter Richtárik, and Michael I. Jordan. Adaptivity of stochastic gradient methods for nonconvex optimization. *SIAM Journal on Mathematics of Data Science*, 4(2):634–648, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1394308.

Hou:2020:AAE

[HLZ20] Thomas Y. Hou, Zhenzhen Li, and Ziyun Zhang. Analysis of asymptotic escape of strict saddle sets in manifold optimization. *SIAM Journal on Mathematics of Data Science*, 2(3):840–871, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Hawkins:2022:TCN

[HLZ22] Cole Hawkins, Xing Liu, and Zheng Zhang. Towards compact neural networks via end-to-end training: a Bayesian tensor approach with automatic rank determination.

SIAM Journal on Mathematics of Data Science, 4(1):46–71, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1391444.

Haddock:2021:GWI

[HM21] Jamie Haddock and Anna Ma. Greed works: an improved analysis of sampling Kaczmarz–Motzkin. *SIAM Journal on Mathematics of Data Science*, 3(1):342–368, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Heinemann:2022:RWB

[HMZ22] Florian Heinemann, Axel Munk, and Yoav Zemel. Randomized Wasserstein barycenter computation: Resampling with statistical guarantees. *SIAM Journal on Mathematics of Data Science*, 4(1):229–259, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/20M1385263.

Ho:2019:SSI

[HN19] Nhat Ho and XuanLong Nguyen. Singularity structures and impacts on parameter estimation in finite mixtures of distributions. *SIAM Journal on Mathematics of Data Science*, 1(4):730–758, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Hickok:2022:ASS

[HNP22] Abigail Hickok, Deanna Needell, and Mason A. Porter. Analysis of spatial and spatiotemporal anomalies using persistent homology: Case studies with COVID-19 data. *SIAM Journal on Mathematics of Data Science*, 4(3):1116–1144, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1435033.

Hien:2022:BBM

[HPG+22] Le Thi Khanh Hien, Duy Nhat Phan, Nicolas Gillis, Masoud Ahookhosh, and Panagiotis Patrinos. Block Bregman majorization minimization with extrapolation. *SIAM Journal on Mathematics of Data Science*, 4(1):1–25, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1432661.

Hamm:2022:IDA

[HS22] Thomas Hamm and Ingo Steinwart. Intrinsic dimension adaptive partitioning for kernel methods. *SIAM Journal on Mathematics of Data Science*, 4(2):721–749, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1435690.

Huguet:2023:TID

[HTR+23] Guillaume Huguet, Alexander Tong, Bastian Rieck, Jessie Huang, Manik Kuchroo, Matthew Hirn, Guy Wolf, and Smita Krishnaswamy. Time-

inhomogeneous diffusion geometry and topology. *SIAM Journal on Mathematics of Data Science*, 5(2):346–372, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1462945`.

Hong:2023:OWP

[HYFB23] David Hong, Fan Yang, Jeffrey A. Fessler, and Laura Balzano. Optimally weighted PCA for high-dimensional heteroscedastic data. *SIAM Journal on Mathematics of Data Science*, 5(1):222–250, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1470244`.

Harris:2021:DTC

[HZ21] Kameron Decker Harris and Yizhe Zhu. Deterministic tensor completion with hypergraph expanders. *SIAM Journal on Mathematics of Data Science*, 3(4):1117–1140, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Jaffe:2021:SNJ

[JAA+21] Ariel Jaffe, Noah Amsel, Yariv Aizenbud, Boaz Nadler, Joseph T. Chang, and Yuval Kluger. Spectral neighbor joining for reconstruction of latent tree models. *SIAM Journal on Mathematics of Data Science*, 3(1):113–141, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Jia:2022:UGM

[JB22] Junteng Jia and Austin R. Benson. A unifying generative model for graph learning algorithms: Label propagation, graph convolutions, and combinations. *SIAM Journal on Mathematics of Data Science*, 4(1):100–125, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1395351`.

Jiang:2023:OCN

[JC23] Jie Jiang and Xiaojun Chen. Optimality conditions for nonsmooth nonconvex-nonconcave min-max problems and generative adversarial networks. *SIAM Journal on Mathematics of Data Science*, 5(3):693–722, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1482238`.

Jiang:2023:ARM

[JCD23] Liwei Jiang, Yudong Chen, and Lijun Ding. Algorithmic regularization in model-free overparametrized asymmetric matrix factorization. *SIAM Journal on Mathematics of Data Science*, 5(3):723–744, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1519833`.

Jorgensen:2021:APR

[JS21] Palle Jorgensen and David E. Stewart. Approximation prop-

erties of ridge functions and extreme learning machines. *SIAM Journal on Mathematics of Data Science*, 3(3):815–832, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Kolda:2020:SGL

[KH20] Tamara G. Kolda and David Hong. Stochastic gradients for large-scale tensor decomposition. *SIAM Journal on Mathematics of Data Science*, 2(4): 1066–1095, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Kolda:2019:ISJ

[Kol19] Tamara G. Kolda. Introduction to SIAM Journal on Mathematics of Data Science (SIMODS). *SIAM Journal on Mathematics of Data Science*, 1(1):1–7, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Khamaru:2021:TDL

[KPR+21] Koulik Khamaru, Ashwin Pananjady, Feng Ruan, Martin J. Wainwright, and Michael I. Jordan. Is temporal difference learning optimal? an instance-dependent analysis. *SIAM Journal on Mathematics of Data Science*, 3(4):1013–1040, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Klebanov:2020:RTC

[KSS20] Ilja Klebanov, Ingmar Schuster, and T. J. Sullivan. A rigorous theory of conditional mean embeddings. *SIAM Journal on Mathematics of Data Science*, 2(3):583–606, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Kueng:2021:BCD

[KT21] Richard Kueng and Joel A. Tropp. Binary component decomposition. Part I: The positive-semidefinite case. *SIAM Journal on Mathematics of Data Science*, 3(2):544–572, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Klatt:2020:ERO

[KTM20] Marcel Klatt, Carla Tameling, and Axel Munk. Empirical regularized optimal transport: Statistical theory and applications. *SIAM Journal on Mathematics of Data Science*, 2(2): 419–443, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Kuo:2020:GSS

[KZLW20] Han-Wen Kuo, Yuqian Zhang, Yenson Lau, and John Wright. Geometry and symmetry in short-and-sparse deconvolution. *SIAM Journal on Mathematics of Data Science*, 2(1): 216–245, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Landa:2023:RIM

[LC23] Boris Landa and Xiuyuan Cheng. Robust inference of manifold density and geometry by doubly stochastic scaling. *SIAM Journal on Mathematics of Data Science*, 5(3):589–614, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https:`

//epubs.siam.org/doi/10.1137/22M1516968.

Landa:2021:DSN

[LCK21] Boris Landa, Ronald R. Coifman, and Yuval Kluger. Doubly stochastic normalization of the Gaussian kernel is robust to heteroskedastic noise. *SIAM Journal on Mathematics of Data Science*, 3(1):388–413, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Leeb:2021:MDW

[Lee21] William E. Leeb. Matrix denoising for weighted loss functions and heterogeneous signals. *SIAM Journal on Mathematics of Data Science*, 3(3):987–1012, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Li:2021:GEM

[Li21] Weilin Li. Generalization error of minimum weighted norm and kernel interpolation. *SIAM Journal on Mathematics of Data Science*, 3(1):414–438, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Li:2021:MGM

[LKA+21] Qunwei Li, Bhavya Kailkhura, Rushil Anirudh, Jize Zhang, Yi Zhou, Yingbin Liang, T. Yong-Jin Han, and Pramod K. Varshney. MR-AN: Manifold regularized generative adversarial networks for scientific data. *SIAM Journal on Mathematics of Data Science*, 3(4):1197–1222, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Li:2022:DCO

[LLC22] Boyue Li, Zhize Li, and Yuejie Chi. DESTRESS: Computation-optimal and communication-efficient decentralized nonconvex finite-sum optimization. *SIAM Journal on Mathematics of Data Science*, 4(3):1031–1051, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1450677.

Li:2022:NWD

[LLM22] Yuqing Li, Tao Luo, and Chao Ma. Nonlinear weighted directed acyclic graph and a priori estimates for neural networks. *SIAM Journal on Mathematics of Data Science*, 4(2):694–720, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M140955X.

Li:2023:AIO

[LLP23] Tianjiao Li, Guanghui Lan, and Ashwin Pananjady. Accelerated and instance-optimal policy evaluation with linear function approximation. *SIAM Journal on Mathematics of Data Science*, 5(1):174–200, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/21M1468668.

Lovas:2023:TNN

[LLRS23] Attila Lovas, Iosif Lytras, Miklós Rásonyi, and Sotirios Sabanis. Taming neural networks with TUSLA: Nonconvex learning via adaptive stochastic gradient Langevin algorithms. *SIAM Journal on Mathematics of Data Science*, 5(2):323–345, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1514283`.

Lai:2020:CSC

[LM20] Ming-Jun Lai and Daniel Mckenzie. Compressive sensing for cut improvement and local clustering. *SIAM Journal on Mathematics of Data Science*, 2(2):368–395, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Little:2022:BGD

[LMM22] Anna Little, Daniel McKenzie, and James M. Murphy. Balancing geometry and density: Path distances on high-dimensional data. *SIAM Journal on Mathematics of Data Science*, 4(1):72–99, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/20M1386657`.

Li:2020:GBR

[LMR+20] Yuan Li, Benjamin Mark, Garvesh Raskutti, Rebecca Willett, Hyebin Song, and David Neiman. Graph-based regularization for regression problems with alignment and highly correlated designs. *SIAM Journal on Mathematics of Data Science*, 2(2):480–504, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Luo:2022:ECL

[LMXZ22] Tao Luo, Zheng Ma, Zhi-Qin John Xu, and Yaoyu Zhang. On the exact computation of linear frequency principle dynamics and its generalization. *SIAM Journal on Mathematics of Data Science*, 4(4):1272–1292, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1444400`.

Li:2023:MOR

[LPH+23] Adam Li, Ronan Perry, Chester Huynh, Tyler M. Tomita, Ronak Mehta, Jesus Arroyo, Jesse Patsolic, Ben Falk, Sridevi Sarma, and Joshua Vogelstein. Manifold oblique random forests: Towards closing the gap on convolutional deep networks. *SIAM Journal on Mathematics of Data Science*, 5(1):77–96, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1449117`.

Lee:2019:LFD

[LR19] Jaeho Lee and Maxim Raginsky. Learning finite-dimensional coding schemes

with nonlinear reconstruction maps. *SIAM Journal on Mathematics of Data Science*, 1(3): 617–642, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Linderman:2019:CSP

[LS19] George C. Linderman and Stefan Steinerberger. Clustering with t-SNE, provably. *SIAM Journal on Mathematics of Data Science*, 1(2):313–332, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Lee:2023:RIA

[LS23] Kiryung Lee and Dominik Stöger. Randomly initialized alternating least squares: Fast convergence for matrix sensing. *SIAM Journal on Mathematics of Data Science*, 5(3):774–799, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1506456`.

Luke:2019:OSM

[LST19] D. Russell Luke, Shoham Sabach, and Marc Teboulle. Optimization on spheres: Models and proximal algorithms with computational performance comparisons. *SIAM Journal on Mathematics of Data Science*, 1(3):408–445, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Lopes:2020:MAC

[LWL20] Miles E. Lopes, Suofei Wu, and Thomas C. M. Lee. Measuring the algorithmic convergence of randomized ensembles: The regression setting. *SIAM Journal on Mathematics of Data Science*, 2(4):921–943, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Landa:2022:BRR

[LZK22] Boris Landa, Thomas T. C. K. Zhang, and Yuval Kluger. Biwhitening reveals the rank of a count matrix. *SIAM Journal on Mathematics of Data Science*, 4(4):1420–1446, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1456807`.

Montanelli:2019:NEB

[MD19] Hadrien Montanelli and Qiang Du. New error bounds for deep ReLU networks using sparse grids. *SIAM Journal on Mathematics of Data Science*, 1(1): 78–92, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Molina-Fructuoso:2022:TDH

[MFM22] Martin Molina-Fructuoso and Ryan Murray. Tukey depths and Hamilton–Jacobi differential equations. *SIAM Journal on Mathematics of Data Science*, 4(2):604–633, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1411998`.

Marchand:2021:ANP

[MGHV21] Melissa Marchand, Kyle Gallivan, Wen Huang, and Paul Van Dooren. Analysis of the

neighborhood pattern similarity measure for the role extraction problem. *SIAM Journal on Mathematics of Data Science*, 3(2):736–757, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Malgouyres:2019:MCS

[ML19] François Malgouyres and Joseph Landsberg. Multilinear compressive sensing and an application to convolutional linear networks. *SIAM Journal on Mathematics of Data Science*, 1(3):446–475, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Mordant:2023:SAR

[MM23] Gilles Mordant and Axel Munk. Statistical analysis of random objects via metric measure Laplacians. *SIAM Journal on Mathematics of Data Science*, 5(2):528–557, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1491022`.

Maroulas:2020:BFP

[MNO20] Vasileios Maroulas, Farzana Nasrin, and Christopher Oballe. A Bayesian framework for persistent homology. *SIAM Journal on Mathematics of Data Science*, 2(1):48–74, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Mukkamala:2020:CCB

[MOPS20] Mahesh Chandra Mukkamala, Peter Ochs, Thomas Pock, and Shoham Sabach. Convex-concave backtracking for inertial Bregman proximal gradient algorithms in nonconvex optimization. *SIAM Journal on Mathematics of Data Science*, 2(3):658–682, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Mazumdar:2020:GBL

[MRS20] Eric Mazumdar, Lillian J. Ratliff, and S. Shankar Sastry. On gradient-based learning in continuous games. *SIAM Journal on Mathematics of Data Science*, 2(1):103–131, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Minster:2020:RAL

[MSK20] Rachel Minster, Arvind K. Saibaba, and Misha E. Kilmer. Randomized algorithms for low-rank tensor decompositions in the Tucker format. *SIAM Journal on Mathematics of Data Science*, 2(1):189–215, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Maire:2022:MKL

[MV22] Florian Maire and Pierre Vandekerkhove. Markov kernels local aggregation for noise vanishing distribution sampling. *SIAM Journal on Mathematics of Data Science*, 4 (4):1293–1319, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1469626`.

Memoli:2022:PLP

[MWW22] Facundo Mémoli, Zhengchao Wan, and Yusu Wang. Persistent Laplacians: Properties, algorithms and implications. *SIAM Journal on Mathematics of Data Science*, 4(2):858–884, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1435471`.

Neumayer:2023:ALF

[NGBU23] Sebastian Neumayer, Alexis Goujon, Pakshal Bohra, and Michael Unser. Approximation of Lipschitz functions using deep spline neural networks. *SIAM Journal on Mathematics of Data Science*, 5(2):306–322, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1504573`.

Newman:2021:TLV

[NRHvBW21] Elizabeth Newman, Lars Ruthotto, Joseph Hart, and Bart van Bloemen Waanders. Train like a (var)Pro: Efficient training of neural networks with variable projection. *SIAM Journal on Mathematics of Data Science*, 3(4):1041–1066, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Ongie:2021:TMN

[OPAB+21] Greg Ongie, Daniel Pimentel-Alarcón, Laura Balzano, Rebecca Willett, and Robert D. Nowak. Tensor methods for nonlinear matrix completion. *SIAM Journal on Mathematics of Data Science*, 3(1):253–279, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

OReilly:2022:SGG

[OT22] Eliza O'Reilly and Ngoc Mai Tran. Stochastic geometry to generalize the Mondrian process. *SIAM Journal on Mathematics of Data Science*, 4(2):531–552, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/20M1354490`.

Osting:2021:CAA

[OWXZ21] Braxton Osting, Dong Wang, Yiming Xu, and Dominique Zosso. Consistency of archetypal analysis. *SIAM Journal on Mathematics of Data Science*, 3(1):1–30, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Pamfil:2019:RMM

[PHLP19] A. Roxana Pamfil, Sam D. Howison, Renaud Lambiotte, and Mason A. Porter. Relating modularity maximization and stochastic block models in multilayer networks. *SIAM Journal on Mathematics of Data Science*, 1(4):667–698, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Parhi:2022:WKF

[PN22] Rahul Parhi and Robert D. Nowak. What kinds of functions do deep neural networks learn? insights from variational spline theory. *SIAM*

Journal on Mathematics of Data Science, 4(2):464–489, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1418642`.

Potts:2021:IAH

[PS21] Daniel Potts and Michael Schmischke. Interpretable approximation of high-dimensional data. *SIAM Journal on Mathematics of Data Science*, 3(4):1301–1323, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Perry:2019:SCM

[PWB+19] Amelia Perry, Jonathan Weed, Afonso S. Bandeira, Philippe Rigollet, and Amit Singer. The sample complexity of multireference alignment. *SIAM Journal on Mathematics of Data Science*, 1(3):497–517, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Romanov:2021:MRA

[RBO21] Elad Romanov, Tamir Bendory, and Or Ordentlich. Multi-reference alignment in high dimensions: Sample complexity and phase transition. *SIAM Journal on Mathematics of Data Science*, 3(2):494–523, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Reeves:2020:NI

[RDB20] Thomas Reeves, Anil Damle, and Austin R. Benson. Network interpolation. *SIAM Journal on Mathematics of Data Science*, 2(2):505–528, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Riihimaki:2023:SCD

[Rii23] Henri Riihimäki. Simplicial q-connectivity of directed graphs with applications to network analysis. *SIAM Journal on Mathematics of Data Science*, 5(3):800–828, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1480021`.

Roald:2022:AAA

[RSC+22] Marie Roald, Carla Schenker, Vince D. Calhoun, Tülay Adali, Rasmus Bro, Jeremy E. Cohen, and Evrim Acar. An AO-ADMM approach to constraining PARAFAC2 on all modes. *SIAM Journal on Mathematics of Data Science*, 4(3):1191–1222, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1450033`.

Saul:2022:NMD

[Sau22] Lawrence K. Saul. A nonlinear matrix decomposition for mining the zeros of sparse data. *SIAM Journal on Mathematics of Data Science*, 4(2):431–463, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1405769`.

Shnitzer:2019:RHC

[SBCG+19] Tal Shnitzer, Mirela Ben-Chen, Leonidas Guibas, Ronen Talmon, and Hau-Tieng Wu. Recovering hidden components in multimodal data with composite diffusion operators. *SIAM Journal on Mathematics of Data Science*, 1(3):588–616, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Salvi:2021:SKS

[SCF+21] Cristopher Salvi, Thomas Cass, James Foster, Terry Lyons, and Weixin Yang. The signature kernel is the solution of a Goursat PDE. *SIAM Journal on Mathematics of Data Science*, 3(3):873–899, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Sun:2020:LRT

[SGL+20] Yiming Sun, Yang Guo, Charlene Luo, Joel Tropp, and Madeleine Udell. Low-rank Tucker approximation of a tensor from streaming data. *SIAM Journal on Mathematics of Data Science*, 2(4):1123–1150, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Solomon:2022:VCN

[SGN22] Justin Solomon, Kristjan Greenewald, and Haikady Nagaraja. k-variance: A clustered notion of variance. *SIAM Journal on Mathematics of Data Science*, 4(3):957–978, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/20M1385895`.

Schaeffer:2020:ESS

[SM20] Hayden Schaeffer and Scott G. McCalla. Extending the step-size restriction for gradient descent to avoid strict saddle points. *SIAM Journal on Mathematics of Data Science*, 2(4):1181–1197, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Shinde:2021:MES

[SNS21] Nimita Shinde, Vishnu Narayanan, and James Saunderson. Memory-efficient structured convex optimization via extreme point sampling. *SIAM Journal on Mathematics of Data Science*, 3(3):787–814, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Shin:2021:BRC

[SRR21] Jaehyeok Shin, Aaditya Ramdas, and Alessandro Rinaldo. On the bias, risk, and consistency of sample means in multi-armed bandits. *SIAM Journal on Mathematics of Data Science*, 3(4):1278–1300, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Schaub:2020:BIS

[SST20] Michael T. Schaub, Santiago Segarra, and John N. Tsitsiklis. Blind identification of stochastic block models from dynamical observations. *SIAM Journal on Mathematics of Data Science*, 2(2):335–367,

???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Sprangers:2023:GIT

[SV23] Brent Sprangers and Nick Vannieuwenhoven. Group-invariant tensor train networks for supervised learning. *SIAM Journal on Mathematics of Data Science*, 5(4):829–853, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1506857`.

Torres:2021:NEU

[TCTER21] Leo Torres, Kevin S. Chan, Hanghang Tong, and Tina Eliassi-Rad. Nonbacktracking eigenvalues under node removal: X-centrality and targeted immunization. *SIAM Journal on Mathematics of Data Science*, 3(2):656–675, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Tudisco:2019:NSM

[TH19] Francesco Tudisco and Desmond J. Higham. A nonlinear spectral method for Core–Periphery detection in networks. *SIAM Journal on Mathematics of Data Science*, 1(2):269–292, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Tudisco:2023:CPD

[TH23] Francesco Tudisco and Desmond J. Higham. Core-periphery detection in hypergraphs. *SIAM Journal on Mathematics of Data Science*, 5(1):1–21, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1480926`.

Tank:2021:CMD

[TLFS21] Alex Tank, Xiudi Li, Emily B. Fox, and Ali Shojaie. The convex mixture distribution: Granger causality for categorical time series. *SIAM Journal on Mathematics of Data Science*, 3(1):83–112, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Thao:2020:PRS

[TLSV20] Nguyen Hieu Thao, David Russell Luke, Oleg Soloviev, and Michel Verhaegen. Phase retrieval with sparse phase constraint. *SIAM Journal on Mathematics of Data Science*, 2(1):246–263, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Trillos:2020:MPA

[TM20] Nicolas García Trillos and Ryan W. Murray. A maximum principle argument for the uniform convergence of graph Laplacian regressors. *SIAM Journal on Mathematics of Data Science*, 2(3):705–739, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Tan:2023:DDM

[TMTS23] Hong Ye Tan, Subhadip Mukherjee, Junqi Tang, and Carola-Bibiane Schönlieb. Data-driven mirror descent with input-convex neural networks. *SIAM Journal on Mathematics*

of Data Science, 5(2):558–587, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1508613`.

Trillos:2019:VLN

[Tri19] Nicolas Garcia Trillos. Variational limits of k-NN graph-based functionals on data clouds. *SIAM Journal on Mathematics of Data Science*, 1(1):93–120, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Tanner:2019:MRI

[TTV19] Jared Tanner, Andrew Thompson, and Simon Vary. Matrix rigidity and the ill-posedness of robust PCA and matrix completion. *SIAM Journal on Mathematics of Data Science*, 1(3):537–554, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Udell:2019:WBD

[UT19] Madeleine Udell and Alex Townsend. Why are big data matrices approximately low rank? *SIAM Journal on Mathematics of Data Science*, 1(1):144–160, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Vershynin:2020:MCN

[Ver20] Roman Vershynin. Memory capacity of neural networks with threshold and rectified linear unit activations. *SIAM Journal on Mathematics of Data Science*, 2(4):1004–1033, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Valdeira:2023:PRG

[VFMS23] Filipa M. Valdeira, Ricardo Ferreira, Alessandra Micheletti, and Cláudia Soares. Probabilistic registration for Gaussian process three-dimensional shape modelling in the presence of extensive missing data. *SIAM Journal on Mathematics of Data Science*, 5(2):502–527, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1495494`.

Veldt:2019:MCO

[VGWS19] Nate Veldt, David F. Gleich, Anthony Wirth, and James Saunderson. Metric-constrained optimization for graph clustering algorithms. *SIAM Journal on Mathematics of Data Science*, 1(2):333–355, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Wang:2022:BCG

[WT22] Ke Wang and Christos Thrampoulidis. Binary classification of Gaussian mixtures: Abundance of support vectors, benign overfitting, and regularization. *SIAM Journal on Mathematics of Data Science*, 4(1):260–284, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1415121`.

Webber:2021:EBD

[WTD+21] Robert J. Webber, Erik H. Thiede, Douglas Dow, Aaron R. Dinner, and Jonathan Weare. Error bounds for dynamical spectral estimation. *SIAM Journal on Mathematics of Data Science*, 3(1):225–252, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Weir:2020:MMB

[WWZM20] William H. Weir, Benjamin Walker, Lenka Zdeborová, and Peter J. Mucha. Multilayer modularity belief propagation to assess detectability of community structure. *SIAM Journal on Mathematics of Data Science*, 2(3):872–900, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Wang:2020:ERE

[WYSO20] Bao Wang, Binjie Yuan, Zuoqiang Shi, and Stanley J. Osher. EnResNet: ResNets ensemble via the Feynman–Kac formalism for adversarial defense and beyond. *SIAM Journal on Mathematics of Data Science*, 2(3):559–582, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Xie:2022:OGE

[XCRW22] Yuege Xie, Hung-Hsu Chou, Holger Rauhut, and Rachel Ward. Overparameterization and generalization error: Weighted trigonometric interpolation. *SIAM Journal on Mathematics of Data Science*, 4(2):885–908, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1390955`.

Xing:2022:BIN

[XSC22] Yue Xing, Qifan Song, and Guang Cheng. Benefit of interpolation in nearest neighbor algorithms. *SIAM Journal on Mathematics of Data Science*, 4(2):935–956, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1437457`.

Yongacoglu:2023:SPI

[YAY23] Bora Yongacoglu, Gürdal Arslan, and Serdar Yüksel. Satisficing paths and independent multiagent reinforcement learning in stochastic games. *SIAM Journal on Mathematics of Data Science*, 5(3):745–773, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/22M1515112`.

Yuan:2019:MSH

[YLB+19] Baichuan Yuan, Hao Li, Andrea L. Bertozzi, P. Jeffrey Brantingham, and Mason A. Porter. Multivariate spatiotemporal Hawkes processes and network reconstruction. *SIAM Journal on Mathematics of Data Science*, 1(2):356–382, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Yurtsever:2021:SSP

[YTF+21] Alp Yurtsever, Joel A. Tropp, Olivier Fercoq, Madeleine Udell, and Volkan Cevher. Scalable semidefinite programming. *SIAM Journal on Mathematics of Data Science*, 3(1): 171–200, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Zhang:2021:NBB

[ZG21] Ruda Zhang and Roger Ghanem. Normal-bundle bootstrap. *SIAM Journal on Mathematics of Data Science*, 3(2):573–592, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.

Zhang:2022:FGT

[Zha22] Tong Zhang. Feel-good Thompson sampling for contextual bandits and reinforcement learning. *SIAM Journal on Mathematics of Data Science*, 4(2):834–857, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M140924X`.

Zhang:2020:IFO

[ZLRY20] Anru R. Zhang, Yuetian Luo, Garvesh Raskutti, and Ming Yuan. ISLET: Fast and optimal low-rank tensor regression via importance sketching. *SIAM Journal on Mathematics of Data Science*, 2(2):444–479, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Zhang:2020:DOC

[ZLZ20] Yuan Zhang, Elizaveta Levina, and Ji Zhu. Detecting overlapping communities in networks using spectral methods. *SIAM Journal on Mathematics of Data Science*, 2(2):265–283, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Zilber:2022:GPO

[ZN22] Pini Zilber and Boaz Nadler. GNMR: A provable one-line algorithm for low rank matrix recovery. *SIAM Journal on Mathematics of Data Science*, 4(2):909–934, ???? 2022. CODEN SJMDAQ. ISSN 2577-0187. URL `https://epubs.siam.org/doi/10.1137/21M1433812`.

Zhu:2019:SMD

[ZQW+19] Wei Zhu, Qiang Qiu, Bao Wang, Jianfeng Lu, Guillermo Sapiro, and Ingrid Daubechies. Stop memorizing: a data-dependent regularization framework for intrinsic pattern learning. *SIAM Journal on Mathematics of Data Science*, 1(3):476–496, ???? 2019. CODEN SJMDAQ. ISSN 2577-0187.

Zheng:2023:EIB

[ZRG23] Léon Zheng, Elisa Riccietti, and Rémi Gribonval. Efficient identification of butterfly sparse matrix factorizations. *SIAM Journal on Mathematics of Data Science*, 5(1):22–49, ???? 2023. CODEN SJMDAQ.

ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/22M1488727.

Zheng:2020:SSL

[ZYWL20] Xinye Zheng, Jianbo Ye, James Z. Wang, and Jia Li. SCOTT: Shape-location combined tracking with optimal transport. *SIAM Journal on Mathematics of Data Science*, 2(2):284–308, ???? 2020. CODEN SJMDAQ. ISSN 2577-0187.

Zhang:2023:PTQ

[ZZS23] Jinjie Zhang, Yixuan Zhou, and Rayan Saab. Post-training quantization for neural networks with provable guarantees. *SIAM Journal on Mathematics of Data Science*, 5(2):373–399, ???? 2023. CODEN SJMDAQ. ISSN 2577-0187. URL https://epubs.siam.org/doi/10.1137/22M1511709.

Zhang:2021:ELC

[ZZST21] Ning Zhang, Yangjing Zhang, Defeng Sun, and Kim-Chuan Toh. An efficient linearly convergent regularized proximal point algorithm for fused multiple graphical lasso problems. *SIAM Journal on Mathematics of Data Science*, 3(2):524–543, ???? 2021. CODEN SJMDAQ. ISSN 2577-0187.