Stanford



Emmanuel Candes

Barnum-Simons Chair of Math and Statistics, Professor of Statistics, Senior Fellow at the Stanford Institute for Human-Centered Artificial Intelligence (HAI) and Professor, by courtesy, of Electrical Engineering

Mathematics

Curriculum Vitae available Online

Bio

BIO

Emmanuel Candès is the Barnum-Simons Chair in Mathematics and Statistics, a professor of electrical engineering (by courtesy) and a member of the Institute of Computational and Mathematical Engineering at Stanford University. Earlier, Candès was the Ronald and Maxine Linde Professor of Applied and Computational Mathematics at the California Institute of Technology. His research interests are in computational harmonic analysis, statistics, information theory, signal processing and mathematical optimization with applications to the imaging sciences, scientific computing and inverse problems. He received his Ph.D. in statistics from Stanford University in 1998.

Candès has received several awards including the Alan T. Waterman Award from NSF, which is the highest honor bestowed by the National Science Foundation, and which recognizes the achievements of early-career scientists. He has given over 60 plenary lectures at major international conferences, not only in mathematics and statistics but in many other areas as well including biomedical imaging and solid-state physics. He was elected to the National Academy of Sciences and to the American Academy of Arts and Sciences in 2014.

ACADEMIC APPOINTMENTS

- Professor, Mathematics
- Professor, Statistics
- Senior Fellow, Institute for Human-Centered Artificial Intelligence (HAI)
- Professor (By courtesy), Electrical Engineering
- Member, Bio-X
- Member, Institute for Computational and Mathematical Engineering (ICME)
- Faculty Director, Stanford Data Science

ADMINISTRATIVE APPOINTMENTS

- Chair, Department of Statistics, Stanford University, (2015-2018)

HONORS AND AWARDS

- 2026 Frontiers of Science Award, International Congress of Basic Science, China (2026)
- Graham and Dodd Award, CFA Institute (2025)
- Breiman Award Lecture, NeurIPS (2022)
- Jack S. Kilby Signal Processing Medal, IEEE (2021)

- Princess of Asturias Award for Technical & Scientific Research, Foundation Princess of Asturias (2020)
- IEEE Signal Processing Society Best Paper Award, Signal Processing Magazine, IEEE (2019)
- Information Theory Society Paper Award, IEEE (2019)
- Fellow, IEEE (2018)
- Fellow, American Mathematical Society (AMS) (2018)
- Fellow, Society for Industrial and Applied Mathematics (SIAM) (2017)
- MacArthur Fellow, MacArthur Foundation (2017)
- Ralph E. Kleinman Prize, Society for Industrial and Applied Mathematics (SIAM) (2017)
- Wald Memorial Lectures, Institute of Mathematical Statistics (2017)
- Prix Pierre Simon de Laplace, Société Française de Statistique (2016)
- Beal-Orchard-Hays Prize, Mathematical Optimization Society (2015)
- George David Birkhoff Prize, American Mathematical Society (AMS) & Society for Industrial and Applied Mathematics (SIAM) (2015)
- Fellow, American Academy of Arts and Sciences (2014)
- Invited Plenary Address at ICM 2014, International Mathematical Union (2014)
- Member, National Academy of Sciences (2014)
- Outstanding Paper Prize, Society for Industrial and Applied Mathematics (SIAM) (2014)
- Prix Jean Kuntzmann, Laboratoire Jean Kuntzmann and PERSYVAL-lab (2014)
- Dannie Heineman Prize, Academy of Sciences at Göttingen (2013)
- Lagrange Prize in Continuous Optimization, Mathematical Optimization Society (MOS) and Society of Industrial and Applied Mathematics (SIAM) (2012)
- Collatz Prize, International Council for Industrial and Applied Mathematics (ICIAM) (2011)
- Simons Chair, Math + X, Simons Foundation (2011)
- George Pólya Prize, Society of Industrial and Applied Mathematics (SIAM) (2010)
- Information Theory Society Paper Award, Information Theory Society (2008)
- Alan T. Waterman Medal, National Science Foundation (2006)
- James H. Wilkinson Prize in Numerical Analysis and Scientific Computing, Society of Industrial and Applied Mathematics (SIAM) (2005)
- Best Paper Award, European Association for Signal, Speech and Image Processing (2003)
- Young Investigator Award, Department of Energy (2002)
- Sloan Research Fellow, Alfred P. Sloan Foundation (2001-2003)
- Third Popov Prize in Approximation Theory, Popov Foundation (2001)
- National Scholarship, Ecole Polytechnique (1990)

PROFESSIONAL EDUCATION

- PhD, Stanford University , Statistics (1998)
- Diplome Ingenieur, Ecole Polytechnique (1993)

LINKS

- https://candes.su.domains/: https://candes.su.domains/

Teaching

COURSES

2026-27

- AI and Data for Science: CS 292, EE 292R, PSYCH 292R, STATS 282 (Aut, Win, Spr)

2025-26

- Applied Matrix Theory: MATH 104 (Aut)
- Theory of Statistics III: STATS 300C (Spr)

2024-25

- Applied Matrix Theory: MATH 104 (Aut)
- Theory of Statistics III: STATS 300C (Spr)

2023-24

- Applied Matrix Theory: MATH 104 (Win)
- Theory of Statistics III: STATS 300C (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Wenlong Ji, Ziang Song

Doctoral Dissertation Advisor (AC)

Ginnie Ma, Yash Nair, Ziang Song, Sarah Zhao

Doctoral Dissertation Co-Advisor (AC)

Joonhyuk Lee, Puheng Li, Alexandru Lopotenco, Michael Salerno, Rui Sun, Skyler Wu

Undergraduate Major Advisor

Armeen Ahmed

Publications

PUBLICATIONS

- **Uncovering heterogeneous effects via localized feature selection.** *Proceedings of the National Academy of Sciences of the United States of America*
  Liu, X., Gu, J., Chen, Z., Chu, B., Liu, L., Morrison, T., Butler, R. R., Edelson, J., Li, J., Longo, F. M., Tang, H., Ionita-Laza, I., Sabatti, et al
  2026; 123 (38): e2527033123

- **CIT-Lasso: a scalable approach beyond guilty by association for identifying causal variants from genome-wide summary statistics.** *Genome biology*
  He, Z., Chu, B., Yang, J., Gu, J., Chen, Z., Liu, L., Morrison, T., Belloy, M. E., Qi, X., Hejazi, N., Mathur, M., Le Guen, Y., Tang, et al
  2026; 27 (1)

- **Model-free selective inference under covariate shift via weighted conformal p-values** *BIOMETRIKA*
  Jin, Y., Candes, E. J.
  2026; 113 (1)

- **Thematic Investing: A Risk-Based Perspective** *FINANCIAL ANALYSTS JOURNAL*
  Candes, E., Hastie, T., Hogan, K., Kahn, R. N., Luo, R., Spector, A.
  2025

- **Uncovering Heterogeneous Effects via Localized Feature Selection.** *bioRxiv : the preprint server for biology*
  Liu, X., Gu, J., Chen, Z., Chu, B., Liu, L., Morrison, T., Butler, R. R., Edelson, J., Li, J., Longo, F. M., Tang, H., Ionita-Laza, I., Sabatti, et al
  2025
- **LEARN THEN TEST: CALIBRATING PREDICTIVE ALGORITHMS TO ACHIEVE RISK CONTROL** *ANNALS OF APPLIED STATISTICS*
  Angelopoulos, A. N., Bates, S., Candes, E. J., Jordan, M., Lei, L.
  2025; 19 (2): 1641-1662
- **Conformal prediction with conditional guarantees** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*
  Gibbs, I., Cherian, J. J., Candes, E. J.
  2025
- **Overparameterized ReLU Neural Networks Learn the Simplest Model: Neural Isometry and Phase Transitions** *IEEE TRANSACTIONS ON INFORMATION THEORY*
  Wang, Y., Hua, Y., Candes, E. J., Pilanci, M.
  2025; 71 (3): 1926-1977
- **AN ADAPTIVELY RESIZED PARAMETRIC BOOTSTRAP FOR INFERENCE IN HIGH-DIMENSIONAL GENERALIZED LINEAR MODELS** *STATISTICA SINICA*
  Zhao, Q., Candes, E. J.
  2025; 35 (1): 91-110
- **Automated Hypothesis Validation with Agentic Sequential Falsifications**
  Huang, K., Jin, Y., Li, R., Li, M. Y., Candes, E., Leskovec, J.
  edited by Singh, A., Fazel, M., Hsu, D., Lacoste-Julien, S., Berkenkamp, F., Maharaj, T., Wagstaff, K., Zhu, J.
  JMLR-JOURNAL MACHINE LEARNING RESEARCH.2025: 25372-25437
- **Can Unconfident LLM Annotations Be Used for Confident Conclusions?**
  Gligoric, K., Zrnic, T., Lee, C., Candes, E. J., Jurafsky, D.
  edited by Ritter, A., Chiruzzo, L., Wang, L.
  ASSOC COMPUTATIONAL LINGUISTICS-ACL.2025: 3514-3533
- **De Finetti's theorem and related results for infinite weighted exchangeable sequences** *BERNOULLI*
  Barber, R., Candes, E. J., Ramdas, A., Tibshirani, R. J.
  2024; 30 (4): 3004-3028
- **Second-order group knockoffs with applications to GWAS.** *Bioinformatics (Oxford, England)*
  Chu, B. B., Gu, J., Chen, Z., Morrison, T., Candès, E., He, Z., Sabatti, C.
  2024
- **Cross-prediction-powered inference.** *Proceedings of the National Academy of Sciences of the United States of America*
  Zrnic, T., Candès, E. J.
  2024; 121 (15): e2322083121
- **In silico identification of putative causal genetic variants.** *bioRxiv : the preprint server for biology*
  He, Z., Chu, B., Yang, J., Gu, J., Chen, Z., Liu, L., Morrison, T., Belloy, M. E., Qi, X., Hejazi, N., Mathur, M., Le Guen, Y., Tang, et al
  2024
- **Controlled Variable Selection from Summary Statistics Only? A Solution via GhostKnockoffs and Penalized Regression.** *ArXiv*
  Chen, Z., He, Z., Chu, B. B., Gu, J., Morrison, T., Sabatti, C., Candes, E.
  2024
- **Statistical Inference for Fairness Auditing** *JOURNAL OF MACHINE LEARNING RESEARCH*
  Cherian, J. J., Candes, E. J.
  2024; 25
- **Conformal Inference for Online Prediction with Arbitrary Distribution Shifts** *JOURNAL OF MACHINE LEARNING RESEARCH*
  Gibbs, I., Candes, E.
  2024; 25: 1-36

- **Permutation Tests Using Arbitrary Permutation Distributions** *SANKHYA-SERIES A-MATHEMATICAL STATISTICS AND PROBABILITY*
  Ramdas, A., Barber, R., Candes, E. J., Tibshirani, R. J.
  2023; 85 (2): 1156-1177
- **Permutation Tests Using Arbitrary Permutation Distributions** *SANKHYA-SERIES A-MATHEMATICAL STATISTICS AND PROBABILITY*
  Ramdas, A., Barber, R., Candes, E. J., Tibshirani, R. J.
  2023
- **KNOCKOFFS WITH SIDE INFORMATION** *ANNALS OF APPLIED STATISTICS*
  Ren, Z., Candes, E.
  2023; 17 (2): 1152-1174
- **A POWER ANALYSIS FOR MODEL-X KNOCKOFFS WITH fp-REGULARIZED STATISTICS** *ANNALS OF STATISTICS*
  Weinstein, A., Su, W. J., Bogdan, M., Barber, R., Candes, E. J.
  2023; 51 (3): 1005-1029
- **CONFORMAL PREDICTION BEYOND EXCHANGEABILITY** *ANNALS OF STATISTICS*
  Barber, R., Candes, E., Ramdas, A. A., Tibshirani, R.
  2023; 51 (2): 816-845
- **What Ron DeVore Means to Me** *CONSTRUCTIVE APPROXIMATION*
  Candes, E.
  2023
- **Sensitivity analysis of individual treatment effects: A robust conformal inference approach.** *Proceedings of the National Academy of Sciences of the United States of America*
  Jin, Y., Ren, Z., Candes, E. J.
  2023; 120 (6): e2214889120
- **Conformalized survival analysis** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*
  Candes, E., Lei, L., Ren, Z.
  2023; 85 (1): 24-45
- **TESTING FOR OUTLIERS WITH CONFORMAL P-VALUES** *ANNALS OF STATISTICS*
  Bates, S., Candes, E., Lei, L., Romano, Y., Sesia, M.
  2023; 51 (1): 149-178
- **Selection by Prediction with Conformal p-values** *JOURNAL OF MACHINE LEARNING RESEARCH*
  Jin, Y., Candes, E. J.
  2023; 24
- **Conformal PID Control for Time Series Prediction**
  Angelopoulos, A. N., Candes, E. J., Tibshirani, R. J.
  edited by Oh, A., Neumann, T., Globerson, A., Saenko, K., Hardt, M., Levine, S.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2023
- **Uncertainty Quantification over Graph with Conformalized Graph Neural Networks**
  Huang, K., Jin, Y., Candes, E., Leskovec, J.
  edited by Oh, A., Neumann, T., Globerson, A., Saenko, K., Hardt, M., Levine, S.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2023
- **Tractable Evaluation of Stein's Unbiased Risk Estimate With Convex Regularizers** *IEEE TRANSACTIONS ON SIGNAL PROCESSING*
  Nobel, P., Candes, E., Boyd, S.
  2023; 71: 4330-4341
- **A Discussion of "A Note on Universal Inference" by Tse and Davison** *STAT*
  Spector, A., Candes, E., Lei, L.
  2023; 12 (1)
- **GhostKnockoff inference empowers identification of putative causal variants in genome-wide association studies.** *Nature communications*

He, Z., Liu, L., Belloy, M. E., Le Guen, Y., Sossin, A., Liu, X., Qi, X., Ma, S., Gyawali, P. K., Wyss-Coray, T., Tang, H., Sabatti, C., Candes, et al
2022; 13 (1): 7209

- **The asymptotic distribution of the MLE in high-dimensional logistic models: Arbitrary covariance** *BERNOULLI*
  Zhao, Q., Sur, P., Candes, E. J.
  2022; 28 (3): 1835-1861
- **Conformal inference of counterfactuals and individual treatment effects** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*
  Lei, L., Candes, E. J.
  2021
- **False discovery rate control in genome-wide association studies with population structure** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Sesia, M., Bates, S., Candes, E., Marchini, J., Sabatti, C.
  2021; 118 (40)
- **Derandomizing Knockoffs** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*
  Ren, Z., Wei, Y., Candes, E.
  2021
- **Interpretable Classification of Bacterial Raman Spectra with Knockoff Wavelets.** *IEEE journal of biomedical and health informatics*
  Chia, C., Sesia, M., Ho, C. S., Jeffrey, S. S., Dionne, J. A., Candes, E., Howe, R. T.
  2021; PP
- **The limits of distribution-free conditional predictive inference** *INFORMATION AND INFERENCE-A JOURNAL OF THE IMA*
  Barber, R., Candes, E. J., Ramdas, A., Tibshirani, R. J.
  2021; 10 (2): 455-482
- **PREDICTIVE INFERENCE WITH THE JACKKNIFE** *ANNALS OF STATISTICS*
  Barber, R., Candes, E. J., Ramdas, A., Tibshirani, R. J.
  2021; 49 (1): 486–507
- **Distribution-free conditional median inference** *ELECTRONIC JOURNAL OF STATISTICS*
  Medarametla, D., Candes, E.
  2021; 15 (2): 4625-4658
- **False discovery rate control in genome-wide association studies with population structure.** *Proceedings of the National Academy of Sciences of the United States of America*
  Sesia, M., Bates, S., Candès, E., Marchini, J., Sabatti, C.
  2021; 118 (40)
- **Discussion of the Paper "Prediction, Estimation, and Attribution" by B. Efron** *INTERNATIONAL STATISTICAL REVIEW*
  Candes, E., Sabatti, C.
  2020; 88: S60–S63
- **ROBUST INFERENCE WITH KNOCKOFFS** *ANNALS OF STATISTICS*
  Barber, R., Candes, E. J., Samworth, R. J.
  2020; 48 (3): 1409–31
- **Discussion of the Paper "Prediction, Estimation, and Attribution" by B. Efron** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*
  Candes, E., Sabatti, C.
  2020; 115 (530): 656–58
- **Metropolized Knockoff Sampling** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*
  Bates, S., Candes, E., Janson, L., Wang, W.
  2020
- **THE PHASE TRANSITION FOR THE EXISTENCE OF THE MAXIMUM LIKELIHOOD ESTIMATE IN HIGH-DIMENSIONAL LOGISTIC REGRESSION** *ANNALS OF STATISTICS*
  Candes, E. J., Sur, P.

2020; 48 (1): 27–42

- **Multi-resolution localization of causal variants across the genome.** *Nature communications*
  Sesia, M. n., Katsevich, E. n., Bates, S. n., Candès, E. n., Sabatti, C. n.
  2020; 11 (1): 1093
- **A comparison of some conformal quantile regression methods** *STAT*
  Sesia, M., Candes, E. J.
  2020; 9 (1)
- **Causal inference in genetic trio studies.** *Proceedings of the National Academy of Sciences of the United States of America*
  Bates, S. n., Sesia, M. n., Sabatti, C. n., Candès, E. n.
  2020
- **A comparison of some conformal quantile regression methods** *STAT*
  Sesia, M., Candes, E. J.
  2020; 9 (1)
- **Causal inference in genetic trio studies.** *Proceedings of the National Academy of Sciences of the United States of America*
  Bates, S. n., Sesia, M. n., Sabatti, C. n., Candès, E. n.
  2020
- **Deep Knockoffs** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*
  Romano, Y., Sesia, M., Candes, E.
  2019
- **The likelihood ratio test in high-dimensional logistic regression is asymptotically a rescaled Chi-square** *PROBABILITY THEORY AND RELATED FIELDS*
  Sur, P., Chen, Y., Candes, E. J.
  2019; 175 (1-2): 487–558
- **A KNOCKOFF FILTER FOR HIGH-DIMENSIONAL SELECTIVE INFERENCE** *ANNALS OF STATISTICS*
  Barber, R., Candes, E. J.
  2019; 47 (5): 2504–37
- **Holographic phase retrieval and reference design** *INVERSE PROBLEMS*
  Barmherzig, D. A., Sun, J., Li, P., Lane, T. J., Candes, E. J.
  2019; 35 (9)
- **A modern maximum-likelihood theory for high-dimensional logistic regression.** *Proceedings of the National Academy of Sciences of the United States of America*
  Sur, P., Candes, E. J.
  2019
- **On the construction of knockoffs in case-control studies** *STAT*
  Barber, R., Candes, E.
  2019; 8 (1)
- **Dual-Reference Design for Holographic Phase Retrieval**
  Barmherzig, D. A., Sun, J., Candes, E. J., Lane, T. J., Li, P., IEEE
  IEEE.2019
- **Conformalized Quantile Regression**
  Romano, Y., Patterson, E., Candes, E. J.
  edited by Wallach, H., Larochelle, H., Beygelzimer, A., d'Alche-Buc, F., Fox, E., Garnett, R.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2019
- **Conformal Prediction Under Covariate Shift**
  Tibshirani, R. J., Barber, R., Candes, E. J., Ramdas, A.
  edited by Wallach, H., Larochelle, H., Beygelzimer, A., d'Alche-Buc, F., Fox, E., Garnett, R.

NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2019

- **The Projected Power Method: An Efficient Algorithm for Joint Alignment from Pairwise Differences** *COMMUNICATIONS ON PURE AND APPLIED MATHEMATICS*
  Chen, Y., Candes, E. J.
  2018; 71 (8): 1648–1714
- **Panning for gold: "model-X' knockoffs for high dimensional controlled variable selection** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*
  Candes, E., Fan, Y., Janson, L., Lv, J.
  2018; 80 (3): 551–77
- **FALSE DISCOVERIES OCCUR EARLY ON THE LASSO PATH** *ANNALS OF STATISTICS*
  Su, W., Bogdan, M., Candes, E.
  2017; 45 (5): 2133–50
- **EigenPrism: inference for high dimensional signal-to-noise ratios** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*
  Janson, L., Barber, R., Candes, E.
  2017; 79 (4): 1037–65
- **Solving Random Quadratic Systems of Equations Is Nearly as Easy as Solving Linear Systems** *COMMUNICATIONS ON PURE AND APPLIED MATHEMATICS*
  Chen, Y., Candes, E. J.
  2017; 70 (5): 822-883
- **Controlling the Rate of GWAS False Discoveries** *GENETICS*
  Brzyski, D., Peterson, C. B., Sobczyk, P., Candes, E. J., Bogdan, M., Sabatti, C.
  2017; 205 (1): 61-75
- **Controlling the Rate of GWAS False Discoveries.** *Genetics*
  Brzyski, D., Peterson, C. B., Sobczyk, P., Candès, E. J., Bogdan, M., Sabatti, C.
  2017; 205 (1): 61-75
- **SLOPE IS ADAPTIVE TO UNKNOWN SPARSITY AND ASYMPTOTICALLY MINIMAX** *ANNALS OF STATISTICS*
  Su, W., Candes, E.
  2016; 44 (3): 1038-1068
- **Super-Resolution of Positive Sources: The Discrete Setup** *SIAM JOURNAL ON IMAGING SCIENCES*
  Morgenshtern, V. I., Candes, E. J.
  2016; 9 (1): 412-444
- **A Differential Equation for Modeling Nesterov's Accelerated Gradient Method: Theory and Insights** *JOURNAL OF MACHINE LEARNING RESEARCH*
  Su, W., Boyd, S., Candes, E. J.
  2016; 17
- **SLOPE-ADAPTIVE VARIABLE SELECTION VIA CONVEX OPTIMIZATION.** *The annals of applied statistics*
  Bogdan, M., van den Berg, E., Sabatti, C., Su, W., Candès, E. J.
  2015; 9 (3): 1103-1140
- **CONTROLLING THE FALSE DISCOVERY RATE VIA KNOCKOFFS** *ANNALS OF STATISTICS*
  Barber, R. F., Candes, E. J.
  2015; 43 (5): 2055-2085
- **Phase retrieval from coded diffraction patterns** *APPLIED AND COMPUTATIONAL HARMONIC ANALYSIS*
  Candes, E. J., Li, X., Soltanolkotabi, M.
  2015; 39 (2): 277-299
- **SLOPE-ADAPTIVE VARIABLE SELECTION VIA CONVEX OPTIMIZATION** *ANNALS OF APPLIED STATISTICS*
  Bogdan, M., Van Den Berg, E., Sabatti, C., Su, W., Candes, E. J.

2015; 9 (3): 1103-1140

- **Adaptive Restart for Accelerated Gradient Schemes** *FOUNDATIONS OF COMPUTATIONAL MATHEMATICS*
  O'Donoghue, B., Candes, E.
  2015; 15 (3): 715-732
- **Randomized Algorithms for Low-Rank Matrix Factorizations: Sharp Performance Bounds** *ALGORITHMICA*
  Witten, R., Candes, E.
  2015; 72 (1): 264-281
- **Phase Retrieval via Wirtinger Flow: Theory and Algorithms** *IEEE TRANSACTIONS ON INFORMATION THEORY*
  Candes, E. J., Li, X., Soltanolkotabi, M.
  2015; 61 (4): 1985-2007
- **Low-Rank Plus Sparse Matrix Decomposition for Accelerated Dynamic MRI with Separation of Background and Dynamic Components** *MAGNETIC RESONANCE IN MEDICINE*
  Otazo, R., Candes, E., Sodickson, D. K.
  2015; 73 (3): 1125-1136
- **Phase Retrieval via Matrix Completion** *SIAM REVIEW*
  Candes, E. J., Eldar, Y. C., Strohmer, T., Voroninski, V.
  2015; 57 (2): 225-251
- **Solving Quadratic Equations via PhaseLift When There Are About as Many Equations as Unknowns** *FOUNDATIONS OF COMPUTATIONAL MATHEMATICS*
  Candes, E. J., Li, X.
  2014; 14 (5): 1017-1026
- **Towards a Mathematical Theory of Super- resolution** *COMMUNICATIONS ON PURE AND APPLIED MATHEMATICS*
  Candes, E. J., Fernandez-Granda, C.
  2014; 67 (6): 906-956
- **ROBUST SUBSPACE CLUSTERING** *ANNALS OF STATISTICS*
  Soltanolkotabi, M., Elhamifar, E., Candes, E. J.
  2014; 42 (2): 669-699
- **Super-Resolution from Noisy Data** *JOURNAL OF FOURIER ANALYSIS AND APPLICATIONS*
  Candes, E. J., Fernandez-Granda, C.
  2013; 19 (6): 1229-1254
- **Unbiased Risk Estimates for Singular Value Thresholding and Spectral Estimators** *IEEE TRANSACTIONS ON SIGNAL PROCESSING*
  Candes, E. J., Sing-Long, C. A., Trzasko, J. D.
  2013; 61 (19): 4643-4657
- **Simple bounds for recovering low-complexity models** *MATHEMATICAL PROGRAMMING*
  Candes, E., Recht, B.
  2013; 141 (1-2): 577-589
- **PhaseLift: Exact and Stable Signal Recovery from Magnitude Measurements via Convex Programming** *COMMUNICATIONS ON PURE AND APPLIED MATHEMATICS*
  Candes, E. J., Strohmer, T., Voroninski, V.
  2013; 66 (8): 1241-1274
- **Single-photon sampling architecture for solid-state imaging sensors** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Van Den Berg, E., Candes, E., Chinn, G., Levin, C., Olcott, P. D., Sing-Long, C.
  2013; 110 (30): E2752-E2761
- **Improving IMRT delivery efficiency with reweighted L1-minimization for inverse planning** *MEDICAL PHYSICS*
  Kim, H., Becker, S., Lee, R., Lee, S., Shin, S., Candes, E., Xing, L., Li, R.
  2013; 40 (7)

- **How well can we estimate a sparse vector?** *APPLIED AND COMPUTATIONAL HARMONIC ANALYSIS*
  Candes, E. J., Davenport, M. A.
  2013; 34 (2): 317-323
- **On the Fundamental Limits of Adaptive Sensing** *IEEE TRANSACTIONS ON INFORMATION THEORY*
  Arias-Castro, E., Candes, E. J., Davenport, M. A.
  2013; 59 (1): 472-481
- **Super-resolution via Transform-invariant Group-sparse Regularization** *IEEE International Conference on Computer Vision (ICCV)*
  Fernandez-Granda, C., Candes, E. J.
  IEEE.2013: 3336–3343
- **Phase Retrieval via Matrix Completion** *SIAM JOURNAL ON IMAGING SCIENCES*
  Candes, E. J., Eldar, Y. C., Strohmer, T., Voroninski, V.
  2013; 6 (1): 199-225
- **A Nonuniform Sampler for Wideband Spectrally-Sparse Environments** *IEEE JOURNAL ON EMERGING AND SELECTED TOPICS IN CIRCUITS AND SYSTEMS*
  Wakin, M., Becker, S., Nakamura, E., Grant, M., Sovero, E., Ching, D., Yoo, J., Romberg, J., Emami-Neyestanak, A., Candes, E.
  2012; 2 (3): 516-529
- **A Compressed Sensing Parameter Extraction Platform for Radar Pulse Signal Acquisition** *IEEE JOURNAL ON EMERGING AND SELECTED TOPICS IN CIRCUITS AND SYSTEMS*
  Yoo, J., Turnes, C., Nakamura, E. B., Le, C. K., Becker, S., Sovero, E. A., Wakin, M. B., Grant, M. C., Romberg, J., Emami-Neyestanak, A., Candes, E.
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- **DISCUSSION: LATENT VARIABLE GRAPHICAL MODEL SELECTION VIA CONVEX OPTIMIZATION** *ANNALS OF STATISTICS*
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