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INTERETS DE RECHERCHE

Analyse des données statistiques, Economie de la santé, Mathématiques, Sciences de la décision,

FORMATION

2012	Doctorat, Autre, Mathématiques, Université Paris Est Créteil, France
2007	Doctorat, Mathématiques, Université Pierre et Marie Curie (UPMC), France *Aggregation methods: optimality and fast rates*
2004	Ecole d'ingénieur, Mathématiques, École Normale Supérieure de Rennes, France

EXPERIENCE PROFESSIONNELLE

Positions académiques principales

2022 - Présent Professeur, ESSEC Business School, France

Autres affiliations académiques

2022 - 2027 Directeur académique du BSc AIDAMS, ESSEC Business School, France

PUBLICATIONS

Articles

LECUE, G. et SHANG, Z. (2025). A geometrical viewpoint on the benign overfitting property of the minimum L2-norm interpolant estimator and its universality. *Probability Theory and Related Fields*, 191, pp. 1401-1484.

LECUE, G. et NEIRAC, L. (2025). Learning with a linear loss function: excess risk and estimation bounds for ERM, minmax MOM and their regularized versions with applications to robustness in sparse PCA. *Journal of Machine Learning Research*, 29(399), pp. 1-90.

GAVRILOPOULOS, G., LECUE, G. et SHANG, Z. (2025). A Geometrical Analysis of Kernel Ridge Regression and its Applications. *Annals of Statistics*, 53(6), pp. 2592-2616.

DEPERSIN, J. et LECUE, G. (2023). On the robustness to adversarial corruption and to heavy-tailed data of the Stahel–Donoho median of means. *Information and Inference: A Journal of the IMA*, 12(2), pp. 814-850.

DEPERSIN, J. et LECUE, G. (2022). Robust sub-Gaussian estimation of a mean vector in nearly linear time. *Annals of Statistics*, 50(1), pp. 511-536.

DEPERSIN, J. et LECUE, G. (2022). Optimal robust mean and location estimation via convex programs with respect to any pseudo-norms. *Probability Theory and Related Fields*, 183(3-4), pp. 997-1025.

KWON, J., LECUE, G. et LERASLE, M. (2021). A MOM-based ensemble method for robustness, subsampling and hyperparameter tuning. *The Electronic Journal of Statistics*, 15(1), pp. 1202-1207.

CHRÉTIEN, S., CUCURINGU, M., LECUE, G. et NEIRAC, L. (2021). Learning with semi-definite programming: statistical bounds based on fixed point analysis and excess risk curvature. *Journal of Machine Learning Research*, 22(230), pp. 1-64.

CHINOT, G., LECUE, G. et LERASLE, M. (2021). Robust high dimensional learning for Lipschitz and convex losses. *Journal of Machine Learning Research*, (233), pp. 1-47.

LECUE, G. et LERASLE, M. (2020). Robust machine learning by median-of-means: Theory and practice. *Annals of Statistics*, 48(2).

ALQUIER, P., COTTET, V. et LECUE, G. (2019). Estimation bounds and sharp oracle inequalities of regularized procedures with Lipschitz loss functions. *Annals of Statistics*, 47(4), pp. 2117-2144.

LECUE, G. et LERASLE, M. (2019). Learning from MOM's principles: Le Cam's approach. *Stochastic Processes and their Applications*, 129(11), pp. 4385-4410.

BELLEC, P.C., LECUE, G. et TSYBAKOV, A.B. (2018). Slope Meets Lasso: Improved Oracle Bounds and Optimality. *Annals of Statistics*, 46(6B), pp. 3603-3642.

LECUE, G. et MENDELSON, S. (2018). Regularization and the small-ball method I: Sparse recovery. *Annals of Statistics*, 46(2), pp. 611-641.

Conférences

LECUE, G. et SHANG, Z. (2023). A Geometrical Viewpoint on the Benign Overfitting Property of the Minimum l2-norm Interpolant Estimator. Dans: 2023 Mini-Workshop: Interpolation and Over-parameterization in Statistics and Machine Learning. Oberwolfach.

LECUE, G. et NEIRAC, L. (2023). Learning with a linear loss function. Excess risk and estimation bounds for ERM, minmax MOM and their regularized versions. Applications to robustness in sparse PCA. Dans: 2024 Meeting in Mathematical Statistics Conference, CIRM. Marseille.

AUTRES ACTIVITES DE RECHERCHE

Membre d'un comité de lecture

Depuis 2024 Annals of Statistics

2022 - 2026 ALEA