Private Private Information

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In a private information structure, agents’ signals contain no information about the signals of their peers. We study how informative such structures can be, and characterize those that are on the Pareto frontier, in the sense that it is impossible to give more information to any agent without violating privacy. In our main application, we show how to optimally disclose information about an unknown state under the constraint of not revealing anything about a correlated variable that contains sensitive information.

The full paper is available at https://arxiv.org/abs/2112.14356.

CCS Concepts: • Mathematics of computing → Nonparametric statistics.

Additional Key Words and Phrases: game theory, information design, beliefs

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