

Seminario

Martedì 17 Dicembre, ore 8:00-10:00

Aula Multimediale, Piano I – Palazzo delle Scienze

PIMA: An Inferential Framework for Multiverse Analysis. Exploring Pitfalls and Possibilities in Data Decisions

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Abstract – In data analysis, researchers often make arbitrary choices, impacting outcomes and contributing to the replication crisis. Multiverse analysis (MA) systematically explores all conceivable model specifications to assess result stability across different analytic decisions. We'll showcase a "Multiverse lab", focusing on model selection, predictor selection, and outlier management, supplemented by graphical summaries. However, MA lacks a comprehensive inferential framework. We introduce "Post-selection Inference for Multiverse Analysis (PIMA)," a robust framework applicable to any generalized linear model. PIMA evaluates predictor-outcome associations across all reasonable models, maintaining strict error control and identifying significant effects through conditional resampling, enhancing result reliability.

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(LM 77 – Direzione Aziendale, **Metodi statistici per l'analisi di mercato e il marketing**, Docente: **Venera Tomaselli**)