European Consortium for Political Research

SISP Società Italiana di Scienza Politica

Università di Genova

MetRiSP

METODI DELLA RICERCA PER LA SCIENZA POLITICA

3rd Workshop ■ Call for Contributions

"Between Explanation and Prediction"

Genoa, September 12-13, 2023
University of Genoa, Via Balbi 5, Aula Mazzini

■ The Series

The MetRiSP Workshop is a biannual initiative of the Standing Group on Political Science Research Methods of the Italian Society of Political Science – SISP.

With its convivial format, it facilitates an open exchange of ideas among scholars of varying research experience levels, while its contributions advance the debate on key issues in research methods and enhance the analysis of political events.

■ The Theme

Since their early developments in applied statistics, Machine Learning algorithms have established explanation and prediction as discrete endeavors of empirical research.

As an early and influential argument goes (Breiman, 2001), the departure is deep and encompassing to the point of raising detached methodological "cultures". These two cultures grow on the trade-off that Machine Learning algorithms bring about between the *desiderata* of accuracy and interpretability of research results. Accuracy calls for discovering patterns in noisy information and for attention to empirical precision. Interpretability requires purposely constructing data from theorized structures and paying attention to misspecification.

Therefore, each purpose results in a different approach to design, data collection and preparation, usage of exploratory analysis, variable selection criteria and analytical techniques, and model validation, selection, and evaluation (e.g., Schmueli 2010).

Moreover, the two-cultures argument stipulates that the trade-off from Machine Learning exerts a differentiating effect on disciplines. The new computational social science deploys deep learning, trees, and forests to bypass the black box of causation and yield accurate predictions, albeit opaque in their making and meaning. The social and political sciences, instead, remain committed to modeling that black box in the light of interpretable causal hypotheses despite their often poor predictive power. Political science – especially its rational choice applications – has long been the textbook example of the latter (e.g., Cox 2001).

Decades after the first formulation of the two-cultures argument, many research communities in the political and social sciences have embraced the algorithmic approach to prediction. In these contexts, however, the reliance on Machine Learning has come with a growing interest in the integration of explanatory and predictive goals (e.g., Jordan, Paul, and Philips 2022; Hofman et al. 2021; Fong and Tyler 2021; Kim, Alvarez, and Ramirez 2020; Benoit, Munger, and Spirling 2019; Chernozhukov et al. 2017; Bonvecchi, Calvo, and Stein 2016; cfr. Dowding and Miller, 2019).

The 3rd MetRiSP Workshop engages scholars at different levels of methodological experience with three intertwined questions:

1. Are explanatory theories and models in political science structurally unable to provide accurate predictions, or are some models better equipped to deal with "the next instance"?
2. Do models for predictive accuracy necessarily entail a waiver of theoretical interpretability?
3. Which approach, technical arrangements, or design strategies can ensure predictive accuracy and causal interpretation at the same time? If any, at what price or under what conditions can the integration succeed?

Any answer to any of these questions or some of their implications is welcome, regardless of whether it draws on original or toy empirical material.

■ Fees & Scholarships

Thanks to the **generous contributions from the ecpr via its Political Methodology SG and the SISP**, the Workshop does not charge any fee to participants.

Based on the creativity and soundness of their proposals, **up to four scholarships of €500** will be awarded **to early-career participants** to contribute to the travel and staying expenses.

Travel grants up to €250 will also be available to senior researchers.

■ Expressions of Interest

Interest in participating in the 3rd MetRiSP Workshop can be expressed **until March 31, 2023**, through the form at bit.ly/MetRiSP3WS.

■ Contacts

For any queries, please contact Alessia Damonte alessia.damonte@unimi.it or Federica Genovese fgenov@essex.ac.uk.

■■ Minimal references

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