



# (MIXED) METHODS IN INTERNATIONAL COOPERATION: THEORY AND APPLICATIONS

EITM Europe Summer Institute 2017  
Collegio Carlo Alberto

Patrick Bayer  
University of Glasgow  
6-8 July 2017

— *Latest version of syllabus is [here](#)* —

## Course details:

Thursday, 6 June: 9:30-12:00 and 14:30-17:00

Friday, 7 June: 9:30-12:00 and 14:30-17:00

Saturday, 8 June: 9:30-12:00 and 14:30-17:00

## Instructor:

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**Motivation:** The basic EITM tenet is to use formal models to derive testable hypotheses in order to put these hypotheses to a rigorous empirical test. Structural estimation is probably the most direct way to achieve this, but it is not always feasible. The EITM approach is moreover methodologically agnostic. This is why this course covers an array of methods (and their theoretical foundations) that are amenable to empirical testing of formal models, including case studies, regression techniques, (survey) experimental methods, and structural estimation for strategic choice. We will discuss which methods are appropriate for what types of game-theoretic models, how to implement these methods, and how to combine various methods to gain most explanatory leverage. Applications will mainly come from research on conflict and international cooperation.

**Character of the course:** The course comes in the format of morning lectures and afternoon applied seminars/labs. The main goal is to encourage students to think hard about how to test hypotheses derived from formal models in a rigorous and multi-faceted way, whatever the exact method(s). In that, the course will be a hybrid of game theory, research design, and methods. It will benefit from active student participation and classroom discussions. So, if you have your ‘own’ models and/or data, feel free to bring them along—I am happy to discuss.

**Prerequisites and readings:** Because of the hybrid nature of the class, I assume you are familiar with the basics of research design, game theory, political science statistics, and have working knowledge in the statistical programming language R, at the level taught in the foundation seminars.

To make our sessions as productive as possible, you should take a careful look at the readings before each class, all of which (except for the two books) are available [here](#). I do not expect you to understand every single aspect or have worked through all the equations/analyses, but you should have a good grasp of the core ideas.

Furthermore, you do *not* have to read papers flagged as ‘APPLICATION’ before coming to class; we will use these readings (i.e., parts of them) for the ‘homework’ sheets and seminar/lab sessions.

As we are going to cover various angles of mixed methods in international cooperation research, there is no single textbook, but these two classics will hopefully put you on the right track, so (re)reading them may be useful:

- Morton, Rebecca B. (1999). *Methods and Models: A Guide to the Empirical Analysis of Formal Models in Political Science*. Cambridge University Press, Princeton.
- King, Gary, Keohane, Robert O, and Verba, Sidney (1994). *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton University Press, Princeton.

If you have not read either, for the purposes of this course, Morton’s (1999) *Methods & Models* is more directly relevant. The following brief chapter by Aldrich, Alt, and Lupia in the *Oxford Handbook of Political Methodology* is a great starting point that sets the stage:

- Aldrich, John H., Alt, James E., and Lupia, Arthur (2008). The EITM Approach: Origins and Interpretations. In Box-Steffensmeier, Janet M., Brady, Henry E., and Collier, David, (Eds), *The Oxford Handbook of Political Methodology*. Oxford University Press, Oxford.

### Day I: Research design and case studies:

- Gerring, John (2004). What Is a Case Study and What Is It Good for? *American Political Science Review*, 98(2):341–354.
- Fearon, James D. and Laitin, David D. (2008). Integrating Qualitative and Quantitative Methods. In Box-Steffensmeier, Janet M., Brady, Henry E., and Collier, David, (Eds), *The Oxford Handbook of Political Methodology*. Oxford University Press, Oxford.
- Lieberman, Evan S. (2005). Nested Analysis as a Mixed-Method Strategy for Comparative Research. *American Political Science Review*, 99(3):435–452.

- Humphreys, Macartan and Jacobs, Alan M. (2015). Mixing Methods: A Bayesian Approach. *American Political Science Review*, 109(4):653–673.
- APPLICATION: Dai, Xinyuan (2005). Why Comply? The Domestic Constituency Mechanism. *International Organization*, 59(2):363–398.
- APPLICATION: Fang, Songying and Stone, Randall W. (2012). International Organizations as Policy Advisors. *International Organisation*, 66(4):537–569.

**Day II: Regression and experimental methods:** Formal models allow to derive directly testable hypotheses, e.g., from comparative statics. This module presents regression and experimental methods for testing theories and discusses common pitfalls as well as solutions to more robust inference.

- von Stein, Jana (2005). Do Treaties Constrain or Screen? Selection Bias and Treaty Compliance. *American Political Science Review*, 99(4):611–622.
- Lupu, Yonatan (2013). The Informative Power of Treaty Commitment: Using the Spatial Model to Address Selection Effects. *American Journal of Political Science*, 57(4):912–925.
- Morton, Rebecca B. and Williams, Kenneth C. (2008). Experimentation in Political Science. In Box-Steffensmeier, Janet M., Brady, Henry E., and Collier, David, (Eds), *The Oxford Handbook of Political Methodology*. Oxford University Press, Oxford.
- Robinson, Gregory, McNulty, John E., and Krasno, Jonathan S. (2009). Observing the Counterfactual? The Search for Political Experiments in Nature. *Political Analysis*, 17(4):341–357.
- APPLICATION: Chaudoin, Stephen (2014). Promises or Policies? An Experimental Analysis of International Agreements and Audience Reactions. *International Organization*, 68(1):235–256.
- APPLICATION: Bayer, Patrick, Marcoux, Christopher, and Urpelainen, Johannes (2015). When International Organizations Bargain Evidence from the Global Environment Facility. *Journal of Conflict Resolution*, 59(6):1074–1100.

**Day III: Structural estimation and strategic choice:** International cooperation is necessarily strategic. While strategic interaction is central to game-theoretic models, it is often ignored in empirical work. Here, we introduce structural estimation to account for strategic choice in empirical estimation.

- Signorino, Curtis (2002). Strategy and Selection in International Relations. *International Interactions*, 28(1):93–115.
- Signorino, Curtis S. (1999). Strategic Interaction and the Statistical Analysis of International Conflict. *American Political Science Review*, 93(2):279–297.
- Signorino, Curtis S. and Yilmaz, Kuzey (2003). Strategic Misspecification in Regression Models. *American Journal of Political Science*, 47(3):551–566.

- APPLICATION: Leblang, David (2003). To Devalue or to Defend? The Political Economy of Exchange Rate Policy. *International Studies Quarterly*, 47(4):533–560.
- APPLICATION: König, Thomas and Mäder, Lars (2014). The Strategic Nature of Compliance: An Empirical Evaluation of Law Implementation in the Central Monitoring System of the European Union. *American Journal of Political Science*, 58(1):246–263.