

# Predicting Global Environmental & Energy Policy

## *Syllabus* Summer 2013

*Prof. Detlef F. Sprinz, Ph.D.*

### **Purpose and Contents**

Students will be introduced to forecasting political negotiations in the field of global environmental and energy policy, employing the web-based software “The Predictioneer’s Game.” The seminar will combine lectures, actor papers, and group simulations. In particular, we forecast the prospects for a global climate agreement for 2020+ and the prospects for agreement on geoengineering research. As a result of this course, students will be enabled to use the generic Predictioneer’s Game to forecast related policies.

### **Logistics**

#### *Time & Specific Location:*

All sessions take place in Building 6, Griebnitzsee, Potsdam (except if indicated otherwise)

- 08 April 2013, 16:15-17:45 h (S 12)
- 11 April 2013, 9:00–12:15 h (S 13)
- 18 April 2013, 10:00-11:30 h (S 13)
- 18 April 2013, 12:30-16:00 h (Building 1, room 150, computer cluster)
- 08 May 2013, 14:00-16:00 h (Cupola, PIK – Potsdam Institute for Climate Impact Research, Telegrafenberg, Potsdam, Building A 31, <http://www.pik-potsdam.de/services/infothek/telegraphenberg-d/images/telegrafenberg.pdf>)
- 08 May 2013, 16:00-18:00 h (PIK, Ostkuppel or Westflügel (t.b.d.), Building A 31, Telegrafenberg)
- 16 May 2013, 9:00–12:15 h (S 18)
- 23 & 30 May 2012, 9:00-12:15 h (S 13)
- 23 May 2013, 18:30-20:00 h: Institute for Advanced Sustainability Analysis, Berliner Strasse 130, 14467 Potsdam, <http://www.iass-potsdam.de/institute/contact>

I may add additional sessions with inside and outside speakers as appropriate for this course. Please check your email for updates.

#### *Study Areas:*

- Master of Arts International Relations (MAIB)
- Master of Public Management
- MA Political Science
- MA Public Administration

Course Registration: <https://puls.uni-potsdam.de>  
Library Reserve (Griebnitzsee, "Semesterapparat"): <http://info.ub.uni-potsdam.de/sap/dat/1d0fae600d1e7d04.php> (Website in German with list of reserved books)  
Capacity: 25 students  
ECTS Credits: 6 (MPM) or 10 (all other programs)

*Contact Details:*

- [dsprinz@uni-potsdam.de](mailto:dsprinz@uni-potsdam.de) (include "Predicting GEEP 2013" in the subject line)
- Skype: sprinz.teaching
- Course website: <https://moodle2.uni-potsdam.de/course/view.php?id=671>
- We will also employ an *additional* contents management system for rapid sharing of files (instructions will follow). This system shall *not* be used for the submission of papers or presentation files.
- Office Hours: by appointment
- [www.sprinz.org](http://www.sprinz.org)

## Code of Conduct

All students are assumed to be familiar with and will abide by the rules of proper academic conduct as specified by the University of Potsdam and the respective inter-university academic programs.

By using Bruce Bueno de Mesquita's "Predictioneer's Game," student agree to abide by its End User License Agreement (<http://www.predictioneersgame.com/end-user-license-agreement>).

## Course Requirements and Grading

This course combines a structured workshop-style setting with paper assignments and presentations (see next pages for details). Students are expected to have read *all* assigned readings *prior* to class and will be able to discuss them.

Your grade comprises the following components:

Requirements	
Oral Participation ( <i>throughout</i> the course)	25%
2 Actor Papers + Presentation	12.5% each
2 Simulation Papers + Presentation	25% each

## Textbook

Bueno de Mesquita, Bruce. 2009. *The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future*. New York: Random House. (Paperback edition available for ca. € 11-12 from various outlets. ISBN-10: 081297977X, ISBN-13: 978-0812979770).

## Overview

Date	Time	Module	Topic
08 April	16:15–17:45h	1	Course Overview
11 April	9:00-10:30h	2	Simulation in the Social Sciences
11 April	10:45-12:15h	3	Predicting Politics
18 April	10:00-11:30h	4	The Predictioneer’s Game: Overview
18 April	12:30-14:15h	5	The Predictioneer’s Game: Practise
18 April	14:30-16:00h	6	<i>Guest Lecture</i> : Prof. Bueno de Mesquita (New York University): The Predictioneer’s Game
08 May	14:00-18:00 h, PIK, Telegrafenberg	7	<i>Liz Gallagher (E3G – Third Generation Environmentalism)</i> : Climate Change Mitigation: Overview <i>plus Q&amp;A</i>
16 May	9:00-10:30h	8	Climate Change Mitigation: Actor Papers
17 May	10:00-11:30 h	9	Guest Lecture: Prof. Jürgen Scheffran (University of Hamburg): Geo-Engineering: Overview
23 May	9:00-10:30h	10	Climate Change Simulation Papers
23 May	18:30-20:00h, IASS	11	IASS: Round Table Discussion: Climate Engineering Governance – Different Perspectives from Around the World
30 May	9:00-10:30h	12	Geo-Engineering: Actor Papers
06 June	9:00-10:30h	13	Geo-Engineering: Simulation Papers
06 June	10:45-12:15h	14	Course Review

## Assignments

### Actor and Simulation Papers

Students will write a total of four papers:

- one actor paper on climate change mitigation for 2020+,
- simulation paper for the negotiations on a climate agreement for 2020+,
- actor paper on negotiations on an agreement on governing geoengineering research, and a
- simulation paper on negotiations on an agreement on governing geoengineering research.

Depending on class size, all or select papers will be presented in class. Actor papers will be up to 1,000 words in length, simulation papers will be up to 2,500 words in length. Details on the format of and the submission procedure for the papers will be provided in class. All papers are due at *15:30h* the day *prior* to their presentation in class. Papers are submitted via Moodle2. Papers have to include the author’s name(s) and a brief description who did what (the latter refers only to simulation papers), student ID numbers, the topic, and a word count on the cover page.

For the Actor Paper, please provide a brief historical overview of the actor, its central positions over time and especially on the particular issue under investigation, and develop a scale for the location of the player on the position scale, and score the actor with respect to influence, position, salience, flexibility, veto status, and fixed position. Please provide references to your sources.

For the simulation paper, you will have to determine which actors to include, determine the relevant scales for the inputs and score the actors with respect to influence, position, salience, flexibility, veto status, and fixed position. You will run the simulation and interpret the output. Please appendix the input file for the simulation as a .txt file and provide references to your sources.

## **Schedule and Readings**

### **Module 1: Course Overview**

### **Module 2: Simulation in the Social Sciences**

Gilbert, Nigel, and Klaus. G. Troitzsch. 2005. *Simulation for the Social Scientist*. second edition ed. Maidenhead: Oxford University Press, chs. 1, 2, & 8.

### **Module 3: Predicting Politics**

Bueno de Mesquita, Bruce. 2002. *Predicting Politics*. Columbus, OH: The Ohio State University Press, chs. 1 & 2.

### **Module 4: The Predictioneer's Game: Overview**

Bueno de Mesquita, Bruce. 2009. *The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future*. New York: Random House, chs. 1-3, 5, 10, & 11 (skim the remainder of the book).

### **Module 5: The Predictioneer's Game: Practise**

Read <http://www.predictioneersgame.com>, esp.

<http://www.predictioneersgame.com/game>

Review Bueno de Mesquita, Bruce. 2009. *The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future*. New York: Random House, 215-226 and prepare the input file (from p. 217) according to the formatting instructions found at <http://www.predictioneersgame.com/game>. Bring the input file to class on a USB stick or equivalent.

### **Module 6: Guest Lecture (via Skype): Prof. Bruce Bueno de Mesquita (Silver Professor, The Wilf Family Department of Politics, New York University): The Predictioneer's Game**

Bueno de Mesquita, Bruce. 2011. "A New Model for Predicting Policy Choices." *Conflict Management and Peace Science* 28 (1):65-87, <http://cmp.sagepub.com/content/28/1/65.full.pdf+html> .

Please prepare all questions you may have for Prof. Bruce Bueno de Mesquita and send them to the course instructor by 17 April 2013, 16:00 h.

**Module 7: Liz Gallagher (E3G – Third Generation Environmentalism):  
Climate Change Mitigation: Overview**

- Bodansky, Daniel and Lavanya Rajamani. 2012. History and Institutions. In: Luterbacher, Urs, and Detlef F. Sprinz, eds. in preparation. *International Relations and Global Climate Change*. Cambridge, MA: The MIT Press, mimeo.
- Sprinz, Detlef F., Guri Bang, Lars Brückner, and Yasuko Kameyama. 2012. Major Countries. In: Luterbacher, Urs, and Detlef F. Sprinz, eds. in preparation. *International Relations and Global Climate Change*. Cambridge, MA: The MIT Press, mimeo.
- Paterson, Matthew. 2012. Business. In: Luterbacher, Urs, and Detlef F. Sprinz, eds. in preparation. *International Relations and Global Climate Change*. Cambridge, MA: The MIT Press, mimeo.
- Skodvin, Tora. 2012. The Role of Non-State Actors in International Policy-Making. In: Luterbacher, Urs, and Detlef F. Sprinz, eds. in preparation. *International Relations and Global Climate Change*. Cambridge, MA: The MIT Press, mimeo.
- IISD Reporting Services. 2012. *Earth Negotiations Bulletin – COP 18 Final*. <http://www.iisd.ca/download/pdf/enb12567e.pdf>.

**Module 8: Climate Change Mitigation: Actor Papers**

Search for additional resources for the positioning of actors, such as the Climate Action Tracker (<http://www.climateactiontracker.org>) and others.

Presentation of Actor Papers in Class.

**Module 9: Prof. Jürgen Scheffran (University of Hamburg): Governing Geo-Engineering: Overview**

- Crutzen, Paul J. 2006. "Albedo Enhancement by Stratospheric Sulfur Injections: A Contribution to Resolve a Policy Dilemma?" *Climatic Change* 77 (3-4):211-20, <http://link.springer.com/content/pdf/10.1007%2Fs10584-006-9101-y>.
- Lempert, Robert J., and Don Prosnitz. 2011. "Governing Geoengineering Research - A Political and Technical vulnerability Analysis of Potential Near-Term Options." Santa Monica, CA: RAND, chs. 1-5, [http://www.rand.org/content/dam/rand/pubs/technical\\_reports/2011/RAND\\_TR846.pdf](http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR846.pdf).
- The Royal Society. 2009. "Geoengineering the Climate: Science, Governance and Uncertainty." London: The Royal Society, chs. 1-6, [http://royalsociety.org/uploadedFiles/Royal\\_Society\\_Content/policy/publications/2009/8693.pdf](http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/publications/2009/8693.pdf).
- Blackstock, Jason J., and Jane C. S. Long. 2010. "The Politics of Geoengineering." *Science* 327 (5965):527, <http://www.sciencemag.org/content/327/5965/527.short>.
- Blackstock, Jason. 2012. "Researchers Can't Regulate Climate Engineering Alone." *Nature* 486:159, <http://www.nature.com/news/researchers-can-t-regulate-climate-engineering-alone-1.10818>.

- Nature. 2012. "A Charter for Geoengineering." *Nature* 485 (7399):415, <http://dx.doi.org/10.1038/485415a> .
- Parson, Edward A., and David W. Keith. 2013. "End the Deadlock on Governance of Geoengineering Research." *Science* 339 (6125):1278-9, [www.sciencemag.org/content/339/6125/1278.short](http://www.sciencemag.org/content/339/6125/1278.short) .
- Parson, Edward (Ted) A., and Lia N. Ernst. 2013. "International Governance of Climate Engineering." *Theoretical Inquiries in Law* 14 (1):307-38, <http://dx.doi.org/10.1515/til-2013-015> .
- Hegerl, Gabriele C., and Susan Solomon. 2009. "Risks of Climate Engineering." *Science* 325 (5943):955-6, [www.sciencemag.org/content/325/5943/955.short](http://www.sciencemag.org/content/325/5943/955.short) .

For background, read

Fleming, James Rodger. 2010. *Fixing the Sky - The Checkered History of Weather and Climate Control*. New York, NY: Columbia University Press, ch. 8.

### **Module 10: Climate Change Simulation Papers**

Presentation of Simulation Papers in Class.

### **Module 11: Round Table Discussion: Climate Engineering Governance – Different Perspectives from Around the World**

### **Module 12: Governing Geo-Engineering: Actor Papers**

Search for additional resources for the positioning of actors. Check the journals *Nature* and *Science* as well as other sources.

Presentation of Actor Papers in Class.

### **Module 13: Governing Geo-Engineering: Simulation Papers**

Presentation of Simulation Papers in Class.

### **Module 14: Course Review**