

6th Risk Center Dialogue Event on
**Big Data, Big Promises: The Next
Generation of Conflict Forecasting**

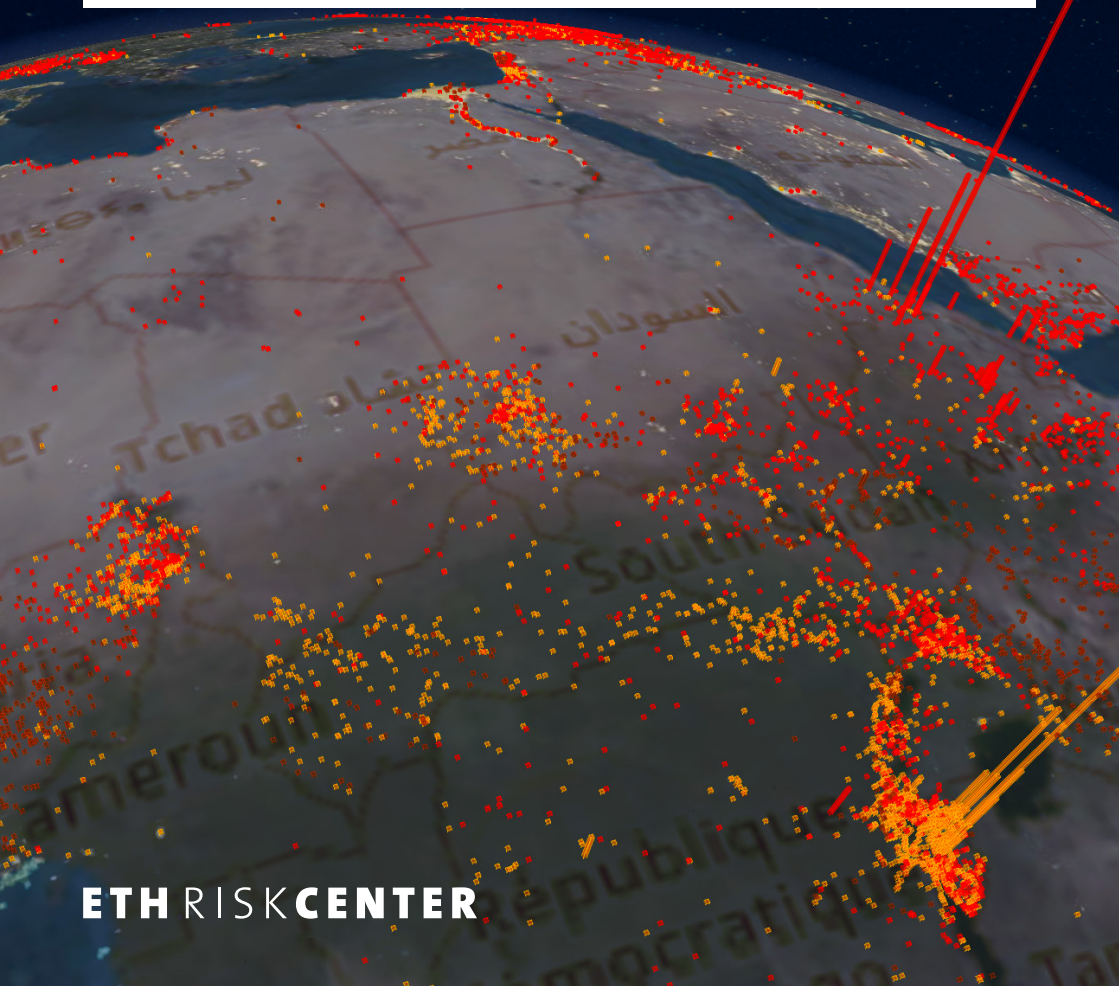
Friday, 26 January 2018, 13:15 – 17:30

HG F5, ETH Zürich, Rämistrasse 101

Registration:

Please register electronically at <http://www.event.ethz.ch/de2601> .

Registration closes on Monday, 22 January 2018. The event is free of charge.



Big Data, Big Promises: The Next Generation of Conflict Forecasting

The 6th Risk Center Dialogue Event addresses the challenges of forecasting armed conflict and other types of political instability. In particular, the participants will evaluate and discuss the extent to which Big Data and machine learning offer means to improve our capacity to predict such events.

We look forward to your active participation in the dialogue!

Programme

- 13:15 **Opening Remarks**
Prof. Lars-Erik Cederman, Chair of Conflict Research, ETH Zurich and Risk Center
- 13:30 **Prof. Michael D. Ward**, Trinity College of Arts and Science, Duke University
Risk Analysis: Data, Models, or Theory?
- 14:30 **Prof. Nils B. Weidmann**, Department of Politics and Public Administration, University of Konstanz
The Margins of Predictability: Conflict Forecasting in a More Peaceful World
- 15:00 **Coffee Break**
- 15:30 **Prof. Thomas Chadeaux**, Trinity College, University of Dublin
Never Again? The Limits of Conflict Forecasting
- 16:00 **Panel Discussion**
Moderation: Prof. Lars-Erik Cederman
Prof. Frank Schweitzer, Chair of Systems Design, ETH Zürich and Risk Center
Prof. Didier Sornette, Chair of Entrepreneurial Risks, ETH Zurich and Risk Center
and Speakers
- 17:00 **Aperitif**

Abstracts

Prof. Michael Ward; Risk Analysis: Data, Models, or Theory?

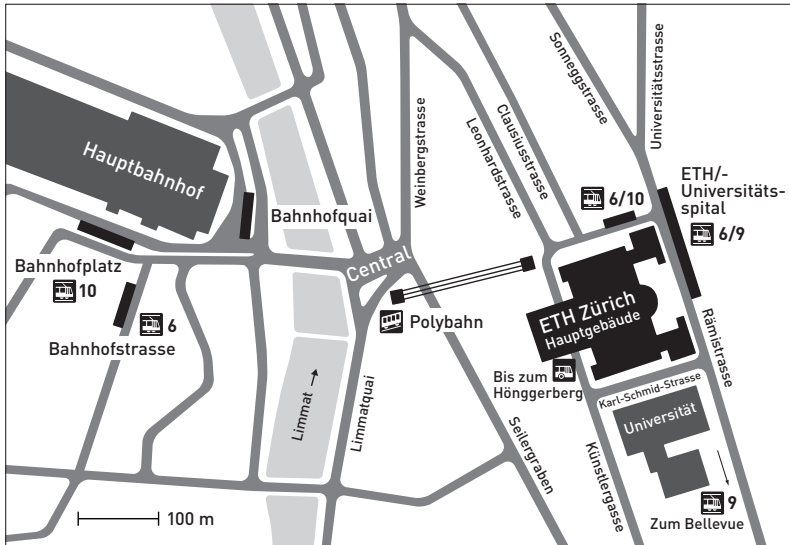
Many social scientists are heavily invested in theory. Theory not only serves to adjudicate debates in the academic literature, but also serves as the primary litmus test for evaluating the usefulness of both data and empirical methods. This current prominence of theory evolved in an epoch characterized by sparse data and simple models. However, today's world has abundant data and complicated methods; as a result many contemporary analysts have little interest in theory. As a result, there is a strong tension between analyses with massive data and machine learning algorithms on the one hand and theoretical explanations on the other. I examine this tension as it relates to the progress of scientific knowledge and practical implications for contemporary risk analyses.

Prof. Nils Weidmann; The Margins of Predictability: Conflict Forecasting in a More Peaceful World

Prediction algorithms typically improve with the number of instances or cases they examine. Fortunately for the world, but unfortunately for conflict forecasters, political violence is becoming much less frequent over time. What does this mean for our ability to predict conflict? In this talk, I illustrate how conflict as a rare phenomenon fundamentally limits forecasting efforts. This is an issue independent of the amount of data we collect, and the methodology we use to analyze it. I propose different ways forward for addressing this challenge.

Prof. Thomas Chadeaux; Never Again? The Limits of Conflict Forecasting

Does the recurrence of wars suggest that we fail to recognize dangerous situations for what they are, and are doomed to repeat the errors of the past? While predictions of violent events have been increasingly accurate using various methods ranging from expert knowledge to quantitative methods and mathematical modeling, we know little about the limits of these approaches. In particular, are our predictive failures due to inaccuracies of our models, data, or assumptions? Or are there aspects of conflicts that will always remain fundamentally unpredictable? In this talk, I discuss the issue of predictability by examining how well different observers have fared in their forecasts. First, did the contemporaries of war correctly anticipate their onset and associated costs? What about leaders? And finally, can we, as researchers, develop better techniques and indicators to warn of future conflicts, or are there inherent limits to our efforts?



Map

ETH Zürich, Main Building, Rämistrasse 101, 8032 Zürich

Travelling by public transport from Zurich Central Station

- From the "Bahnhofstrasse/HB": Tram no. 6 (towards Zoo) as far as the "ETH/Universitätsspital".
- From the "Bahnhofplatz/HB": Tram no. 10 (towards Airport or Oerlikon station) as far as the "ETH/Universitätsspital".
- Walk over to "Central" and take the Polybahn (departs every three minutes) to the Polyterrasse.

You will need a ticket for zone 110 (city of Zurich).

Contact

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