

# Einladung zum ZeSOB Kolloquium

Am Montag, **11. Juni 2018**, um **16 Uhr c.t.** spricht Herr

**Prof.Dr. Adalbert F.X. Wilhelm**

(Jacobs University Bremen)

über

## **Data-driven classification approaches for the quantitative analysis of international conflict**

The increase in available data about military conflicts, e.g. collected by the correlates of war project or the Uppsala Conflict Data Program, provides the political science researcher with ample opportunities to study the onset of wars and other armed conflicts. This has led to a significant increase in application papers using quantitative analysis techniques to model armed conflicts as one major aspects of international relations. From a methodological point of view the logistic regression has become kind of a panacea for these analyses and rests at the cornerstone in this field. Over the last decades a number of modern classification algorithms, such as CART, AdaBoost, neural nets, and support vector machines, have been proposed.

In this talk, we present an evaluative comparison of some modern classification algorithms, such as CART, AdaBoost, random forests, and support vector machines, to predict the incidences of military conflicts. This evaluative comparison is based on two main aspects: the importance of variables within the classifier as well as the prediction accuracy. While modern classification procedures are able to improve the prediction accuracy as compared to the traditionally used logistic regression, the logistic regression still holds a large advantage in terms of interpretability of the variables' relevancy. The fact that military conflicts constitute rare events in these data sets is fortunate from a humanitarian point of view. It poses, however, methodological challenges in the form of class imbalance.

**Der Vortrag findet am Montag, 11. Juni 2018, um 16 Uhr c.t. im Raum W03 1-152 am Campus Wechloy der Universität Oldenburg, Carl-von-Ossietzky-Straße 9-11, 26129 Oldenburg statt.**

**Alle Interessierten sind herzlich willkommen!**

(Einladungsvorschlag von Prof. Dr. Peter Ruckdeschel)