# Automated Measurement of Legislative Significance using Web Data and Positive Unlabeled Learning

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| Instructors: | Prof. Radoslaw Zubek |
| Time: | Tuesday, November 07 2018:  **18.15 – 19:45** |
| Place: | Feldkirchenstr. 21, FG1/00.06 |
| Registration: | The Guest Lecture is part of the Pillar 4 Weekly Seminar but is open to everyone. |

**Description**

Measurement is crucial for political scientists but it often proves a laborious and time intensive endeavor, while grappling with issues of reproducibility and measurement error. This is particularly true for latent variables.

In this paper, we propose a new method for measuring an important latent variable in political science: the significance of government legislation. We develop a semi-supervised machine learning approach to the classification of important legislation and apply it to UK government regulations between 2009 and 2016.

Appling recent advances from positive and unlabeled models (PU learning), our method offers a *reproducible* means of *automatically* labeling legislation without the need for intensive hand-coding. Our computational model allows for *prediction* and our innovative use of the websites of law firms as raters provides us with evaluations of legislative significance that are both *contemporaneous* and *specialist*. We believe our automated method of classification could be extended to other political systems and areas.