**Workshop**

**„Introduction to machine learning with R“**

**Lead: Jan-Philipp Kolb, Alexander Murray-Watters (GESIS)**

**03./04. June 2019**

**Mannheim**

**Agenda**

**Day 1**

10.00 – 11.30 A1 - **Lay the foundations in R**

B1 – **Regression with R**

11.45 - 13.00 B2 - **Lasso and ridge regression**

13.00 – 14.00 Lunch

14.00 – 15.30 C1 - **Supervised learning: tree-methods and bagging**

C2 - **Supervised learning: gradient boosting**

15.30 – 16.00 Break

16.00 – 18.00 C3 - **Supervised learning: random forests**

D1 - **Supervised learning: neural network**

18.00 [Wine & Cheese]

**Day 2**

9.00 – 10.30 E - **Unsupervised Learning: kmeans, hdbscan**

10.30 – 10.45 Break

10.45 – 12.30 F - **The dangers of machine learning**

12.30 – 13.30 Lunch

13.30 - 16.00 G - **reticulate package: Umap**

16.00 End of the event