Data Visualization with R

**Instructor:** Ákos Máté, Research Fellow, Center for Social Sciences, Budapest

**Date & Time:**
- Wednesday, November 02, 2022, 09:00 a.m. to 12:00 p.m. (s.t.)
- Friday, November 04, 2022, 09:00 a.m. to 12:00 p.m. (s.t.)

**Place:**
Virtual Workshop via Zoom
(details to be announced to course participants in due time)

**Registration:**
To register, please send an email to courses.bagss@uni-bamberg.de by October 13, 2022. Registration is mandatory.

**Short Outline**
The aim of the workshop is to provide an accessible introduction into the use of R for data visualization. R’s ggplot2 package and its extensions provide a flexible framework for data visualization and they are widely used in both academia and industry.

**TOPICS COVERED**
- Data visualization basics (very briefly)
- Introduction to the most common plot types (barcharts, scatterplots, etc.)
- Introduction to some not-so-common plot types (maps, networks)
- How to visualize results of different research outputs
- Creating unique themes
- Programming with ggplot2

The workshop is practice-oriented, which means that we will have some smaller and bigger coding challenges to exercise the ggplot muscle memory early on. If you have your own dataset and are looking for ideas on possible ways to represent it, let me know and we can take a collective look at it.

**PREREQUISITES**
- You should have a **working R (version 4.0.0 +) and RStudio (version 1.4.+)** installed.
- Basic familiarity with R is expected.
- Some statistical knowledge is also assumed (but not necessary), but if you have seen an OLS regression then you are good to go.
Preparation
To refresh or solidify your skills in R, you can also cover the following introductory material provided by Ákos Máté:
- The free and online book *R for Data Science*, chapters 9 – 12

About the Trainer
Ákos Máté is a research fellow at the Centre for Social Sciences. His key research area is the political economy of the European Union and its members’ fiscal governance. He uses a wide variety of methods in his research, particularly automated text analysis (and attached various machine learning approaches), network analysis and more traditional econometric techniques.