

# Advanced R: ggplot2

## Benefits

The goal is to understand the concepts of packages graphics, ggplot2 and related packages. The participants learn the advantages and disadvantages of different approaches to statistical graphics implementations. After the course, the participants are able to produce plots more efficiently by knowing the grammar of graphics and its implementations.

## Contents

- Graphics to learn about your data versus graphics to present results
- The traditional way to produce graphics: the graphics package
- The grammar of graphics using ggplot2 including all layers and creating own themes for cooperate design
- Graphics as an art and science: Choosing colours; output formats for web and documents; fine tuning of graphics
- Extensions such as ggmap for producing maps
- Visualisation of missing values using package VIM
- Making graphical tables including sparklines

### TRAINER

**Matthias Templ**, PhD in Techn. Mathematics, Venia Legendi (habilitation) in Statistics, lecturer and researcher at ZHAW Switzerland

### TARGET ATTENDEES

Junior and senior researchers, PhD candidates and subject matter specialists who produce statistical graphics on regular basis. The attendees should bring basic knowledge in R. A computer is necessary with the R software environment installed including packages ggplot2, ggvis, sparkTable, VIM, ggmap, tmap, sp, ggthemes, gplots and shiny

**DATES** 11–12 May 2017

**VENUE** Eurac Research, Room 8

**TIME** 9.00–17:30

**MAXIMUM NUMBER OF PARTICIPANTS** 14

**LANGUAGE** English

**COURSE CODE** INT-RRR-17