

Introducing mgcViz

Matteo Fasiolo and Simon N. Wood

matteo.fasiolo@bristol.ac.uk

Material available at:

https://github.com/mfasiolo/workshop_RSS19

The `mgcv` ecosystem:

- `gamm4` generalized additive mixed model using `lme4` for estimation
- `refund` functional GAMs using `mgcv` estimation
- `qgam` quantile GAMs (last session)
- `mgcViz` GAM visualization using `ggplot2` (next)
- and many others `scam`, `vagam`, ...

mgcViz: talk structure

mgcViz: why do we need it and how does it work?

- limitations of mgcv plotting methods
- mgcViz layer-based solution
- smooth effects plots
- diagnostic plots

For detailed account see

Fasiolo, M., R. Nedellec, Y. Goude, and S. N. Wood (2018). Scalable visualisation methods for modern generalized additive models.
arXiv:1809.10632

or online training material

<https://mfasiolo.github.io/mgcViz/index.html>

mgcViz: why and how

Now we go to “mgcViz.html” for demonstration