First announcement and call for papers:

Workshop of the

Working groups "Ecology and Environment", "Bayes Methods", "Spatial Statistics" (International Biometric Society, German Region) and "Biometry" (German Association of Forest Research Stations, DVFFA)

Lübeck or online, 24-26/9/2025

"Probabilistic Risk Analysis and Bayesian Decision Theory"

Workshop Objectives

The aim of the workshop is to provide an overview of the theory of Bayesian risk-based decision theory and its application in epidemiology and environmental sciences like forestry. Presentations on the following topics are particularly welcome:

- Theoretical foundations and applications of probabilistic risk analysis and of Bayesian decision theory
- Efficient algorithms and software solutions for risk determination and decision theory
- Current work, including examples, on the convergence of Bayesian and optimal frequentist decision theory
- Current work in Bayesian or spatial statistics, preferably in the intersection of both
- Current applications of risk analysis and decision theory in ecology or forestry

Invited Tutorial

Marcel van Oijen & Mark Brewer (Biomathematics & Statistics Scotland, authors of: *Probabilistic Risk Analysis and Bayesian Decision Theory*):

Probabilistic Risk Analysis and Bayesian Decision Theory

Besides a general introduction, the authors will introduce us to the "nimble" software (see: https://r-nimble.org). Exercises will be part of the sessions. Exercises require a personal computer with R >= 3.1.2 and packages copula, fields, geodata, mvtnorm, nimble, plot.matrix, raster, stringr, tidyverse, truncnorm, VineCopula, yarrr.

Further Information

Please visit the websites of the working groups: <u>http://www.biometrische-gesellschaft.de/arbeitsgruppen/bayes-methodik.html</u>. <u>http://www.biometrische-gesellschaft.de/arbeitsgruppen/oekologie-und-umwelt.html</u> <u>http://www.raeumliche-statistik.de/</u>

Instructions for Authors

Please send **abstracts** (max. one A4 page, 12pt) of presentations to the organisers (below) by e-mail. The expected length for each presentation is 30 minutes incl. discussion. The workshop language will be English, but presentations in German will also be welcome. Presentation files should be made available for publication on the websites of the working groups.

Important Dates

15/8/2025	Submission deadline for abstracts
25/8/2025	Notification of acceptance of abstracts; publication of the programme shortly thereafter
03/9/2025	Deadline for registration (late registration only as long as places available). Please
	indicate participation in the pay-as-you-go dinners.

Registration

For registration for this workshop, please send an email with your name, affiliation and mode of participation to <u>Reinhard.Vonthein@uni-luebeck.de</u>, <u>Wolfgang.Falk@lwf.bayern.de</u>, or <u>Tobias.Mette@lwf.bayern.de</u>. There is no registration fee, but membership in one of the societies is encouraged. A link to the videoconference will be sent by e-mail ca. 21/9/2025. Organisers may cancel, postpone or change the programme for a lack of participants or other good reasons. Registered participants would be informed. Other liabilities like costs of travel or time are excluded.

Organisers

Working Group "Ecology and Environment":

Dr. Tobias Mette (Bayerische Landesanstalt für Wald und Forstwirtschaft) Tobias.Mette@lwf.bayern.de

Working Group "Bayes Methods":

Dr. Reinhard Vonthein (Universität zu Lübeck) reinhard.vonthein@uni-luebeck.de

Working Group "Spatial Statistics":

Dr. Johannes Dreesman (Niedersächsisches Landesgesundheitsamt) Johannes.Dreesman@nlga.Niedersachsen.de

Working Group "Biometry" of the German Association of Forest Research Stations:

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