# INLA AND BEYOND: PRACTICAL SPATIAL MODELLING WITH `INLABRU` FOR ECOLOGICAL RESEARCH

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## 1 Welcome to the course!

- Welcome to the `inlabru` workshop!
- The goal of this workshop is to introduce new users to the `inlabru` software for Bayesian spatial modelling using integrated nested Laplace approximation (INLA).

> ! important

Please use the instructions provided here to install and check your installation *before* the course starts.

## 2 Learning Objectives for the workshop

By the end of the workshop, participants will have an understanding of:

- The `inlabru` workflow and software principles.
- The motivation for and the challenges of analysing and modelling spatial data.
- Different types of statistical models used to analyse different spatial data structures.
- The implementation of these models in the `inlabru` package

## 3 Intended audience

The workshop aims to cater for participants with a range of different backgrounds, who are interested in analysing data with modern spatial statistical modelling approaches using flexible and computationally efficient software.

## 4 Prerequisites

Participants should be familiar with the R environment, and general statistical approaches to statistical modelling, such as regression, analysis of (co)variance, and generalized linear models.

No knowledge of `R-INLA` or `inlabru` is required.

| Time | Topic |
|---|---|

# 5 Schedule Program

| Time | Topic |
|---|---|
| 13:00 - 14:00 | Workshop registration |
| 14:00 - 14:45 | **Session 1**: Introduction to `inlabru` |
| 14:45 - 15:30 | Practical Session 1 |
| 15:30 - 16:00 | Refreshment break |
| 16:00 - 16:45 | **Session 2**: Spatial Modelling with `inlabru` |
| 16:45 - 17:45 | Practical Session 2 |
| 17:45 - 18:00 | Wrap-up and outlook |