

Package: AntMAN (via r-universe)

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Version 1.1.0

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Type Package

Title Anthology of Mixture Analysis Tools

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Description Fits finite Bayesian mixture models with a random number of components. The MCMC algorithm implemented is based on point processes as proposed by Argiento and De Iorio (2019) <[arXiv:1904.09733](https://arxiv.org/abs/1904.09733)> and offers a more computationally efficient alternative to reversible jump. Different mixture kernels can be specified: univariate Gaussian, multivariate Gaussian, univariate Poisson, and multivariate Bernoulli (latent class analysis). For the parameters characterising the mixture kernel, we specify conjugate priors, with possibly user specified hyper-parameters. We allow for different choices for the prior on the number of components: shifted Poisson, negative binomial, and point masses (i.e. mixtures with fixed number of components).

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LazyData true

URL <https://github.com/bbodin/AntMAN>

Imports stats, graphics, grDevices, Rcpp (>= 0.12.3), sals, mvtnorm, mclust, GGally, bayesplot, Rdpack

RdMacros Rdpack

Suggests dendextend, ggdendro, ggplot2, jpeg

LinkingTo Rcpp, RcppArmadillo

RoxygenNote 7.1.1

Encoding UTF-8

Roxygen list(markdown = TRUE)

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Repository <https://bbodin.r-universe.dev>

RemoteUrl <https://github.com/bbodin/antman>

RemoteRef HEAD

RemoteSha b1aed991b8e571b3fb89820138d323d2bce82f86