

空间广义线性混合效应模型及其应用

毕业答辩

导师：李再兴

学生：黄湘云



理学院
计算数学与统计系
中国矿业大学（北京）

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Outline 目录

- 1 Introduction (Motivations and goals)
- 2 Literature reviews
- 3 Geostatistical model (SGLMM)
- 4 Computing details and simulations
- 5 Real data analysis (Applications)
- 6 Discussion

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Frameworks, Packages and Softwares I

- R:** geoR geoRglm spatial PrevMap
Ribeiro Jr & Diggle (2016); Christensen & Ribeiro Jr (2015); Ripley (2015); Giorgi & Diggle (2016)
- Stan:** Stan ¹ interfaces with R (RStan) ,Python (PyStan) , MATLAB (MatlabStan) and more
Gelman *et al.* (2015); Bob *et al.* (2017)
- PyMC3:** Probabilistic programming in Python using PyMC3
Salvatier *et al.* (2016)
- JAGS:** **J**ust **A**nother **G**ibbs **S**ampler ²
Bayesian hierarchical models using Markov chain Monte Carlo (MCMC)
- BUGS:** **B**ayesian inference **U**sing **G**ibbs **S**ampling , such as winBUGS, OpenBUGS

Frameworks, Packages and Softwares II

R-INLA: Integrated **N**ested **L**aplace **A**pproximations
Rue *et al.* (2009, 2016); Gómez-Rubio & Rue (2017)

¹<http://mc-stan.org/>

²https://en.wikipedia.org/wiki/Just_another_Gibbs_sampler

Thank You

✉ xiangyunfaith@outlook.com

🔗 <https://github.com/Cloud2016>



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