



# The Generalized Linear Mixed Model Leading Terms

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Department of Statistics, Ludwigstr. 33, Room 144  
and online via Zoom (Link)  
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Generalized linear mixed models were born in the early 1990s as the love child of linear mixed models (1950s) and generalized linear models (1970s). Now, in the 2020s, every day ends with the publication of around 2-3 new papers on the topic. Despite their ever-increasing ubiquity, there has been very little in the way of asymptotic theory for the maximum likelihood estimators of generalized linear mixed model parameters. Apart from simple conveyance of estimator behaviour, there are the usual payoffs concerning statistical inference, sample size calculations and optimal design. This talk will describe new results concerning the generalized linear mixed model leading terms, and is joint with Jiming Jiang and Aishwarya Bhaskaran. Ramifications concerning variational approximation will also be mentioned.

## **Biography:**

Matt Wand is a Distinguished Professor of Statistics at University of Technology Sydney, Australia. He is an elected fellow of the American Statistical Association, the Institute of Mathematical Statistics and the Australian Academy of Science. His main research areas are generalized linear mixed models, semiparametric regression and variational approximate inference.