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| --- | --- | --- | --- | --- |
| **Package** | simr | longpower | pamm |  |
| **Design** |  |  |  |  |
| LMMs | ✓ | ✓ | ✓ |  |
| Any lme4 LMM | v3 | ? | ? |  |
| Any nlme LMM | v3 | ? | ? |  |
| GLMMs | v2 | ? | ? |  |
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| **User** |  |  |  |  |
| Tutorial vignette | ✓ | ~ | 🗶 |  |
| Defaults | ✓ | ? | ? |  |
| No programming required | ✓ | ✓ | ✓ |  |
| Use lme4 notation | ✓ | 🗶 | 🗶 |  |
| Graphics | ✓ | ? | ✓ |  |
|  |  |  |  |  |
| **Analysis** |  |  |  |  |
| Simulation | ✓ |  | ✓ |  |
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Things that aren’t mixed model power analysis:

simFrame, simSummary – simulation tools.

pwr – simple power analysis (e.g. t-test for differences in means).