overdispersion simulations

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22/11/2019

CI's

The bootstrap has now been calculated by refitting the model.

```
## Warning in is.na(results$ee): is.na() applied to non-(list or vector) of
## type 'NULL'
```

```
library(knitr)
header.cols <- c(1,3,4,5,19,20,2)
kable(results[,c(header.cols,7,8,9)],
      caption='Coverage of 90% CIs',
      digits=2)
```

Coverage of 90% CIs

Population	n	b1	b2	mu.lower	mu.upper	phi	cover.chisq	cover.boots	cover.vgam
Poisson	30	-3	3	0.05	1	1	NA	0.92	NaN
Negbin	30	-3	3	0.05	1	3	NA	0.97	NaN
Negbin	30	-3	3	0.05	1	5	NA	0.97	NaN

```
kable(results[,c(header.cols,10,11,12)],
      caption='CI for beta excludes zero',
      digits=2)
```

CI for beta excludes zero

Population	n	b1	b2	mu.lower	mu.upper	phi	pow.chisq	pow.boots	pow.vgam
Poisson	30	-3	3	0.05	1	1	NA	0.71	NaN
Negbin	30	-3	3	0.05	1	3	NA	0.17	NaN
Negbin	30	-3	3	0.05	1	5	NA	0.08	NaN

```
kable(results[,c(header.cols,13,14,15)],
      caption = '90% CIs median width',
      digits = 2)
```

90% CIs median width

Population	n	b1	b2	mu.lower	mu.upper	phi	med.chisq	med.boots	med.vgam
Poisson	30	-3	3	0.05	1	1	NA	4.71	NA
Negbin	30	-3	3	0.05	1	3	NA	11.19	NA
Negbin	30	-3	3	0.05	1	5	NA	16.57	NA

```
kable(results[,c(header.cols,16,17,18)],
      caption = 'Proportion of times method does not work',
    digits = 2)
```

Proportion of times method does not work

Population	n	b1	b2	mu.lower	mu.upper	phi	err.chisq	err.boots	err.vgam
Poisson	30	-3	3	0.05	1	1	NA	0	0
Negbin	30	-3	3	0.05	1	3	NA	0	0
Negbin	30	-3	3	0.05	1	5	NA	0	0