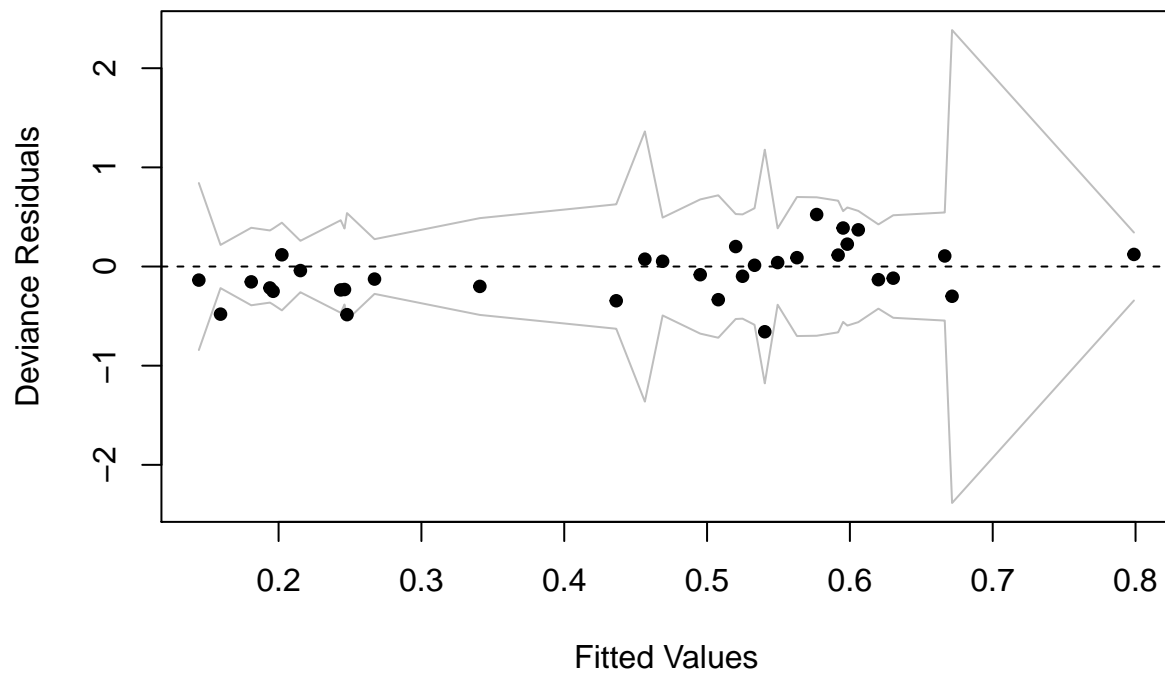


# Untitled

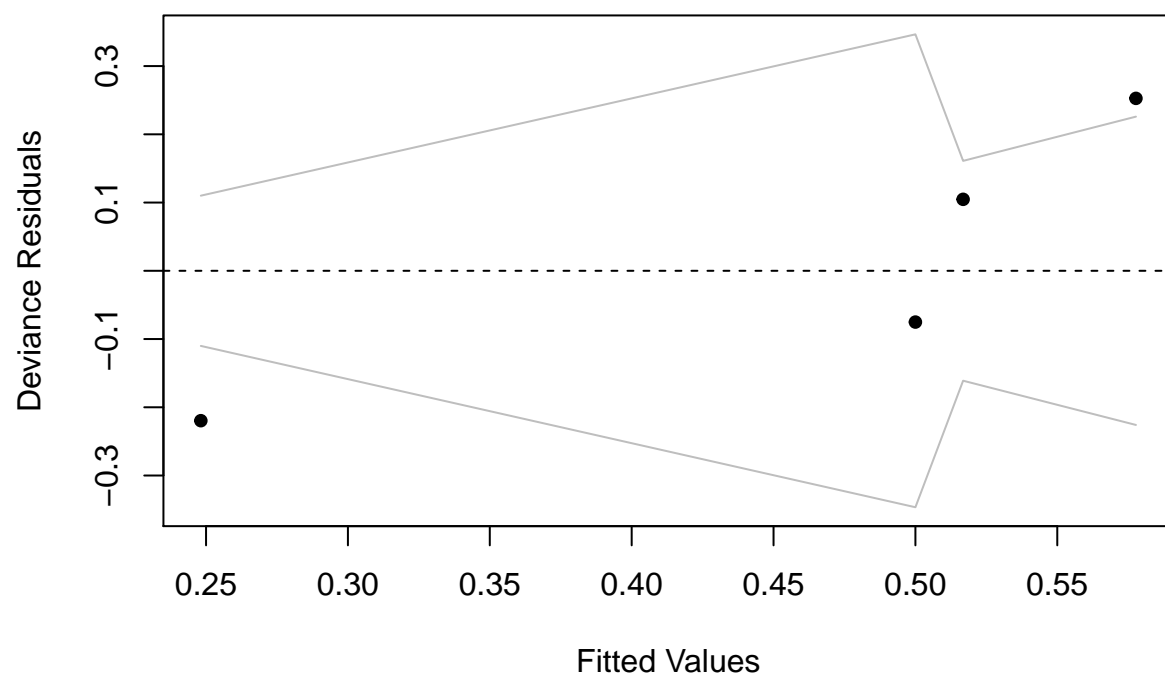
*Nathaniel Brown, In Hee Ho, Sarah Zimmermann*

*October 19, 2017*

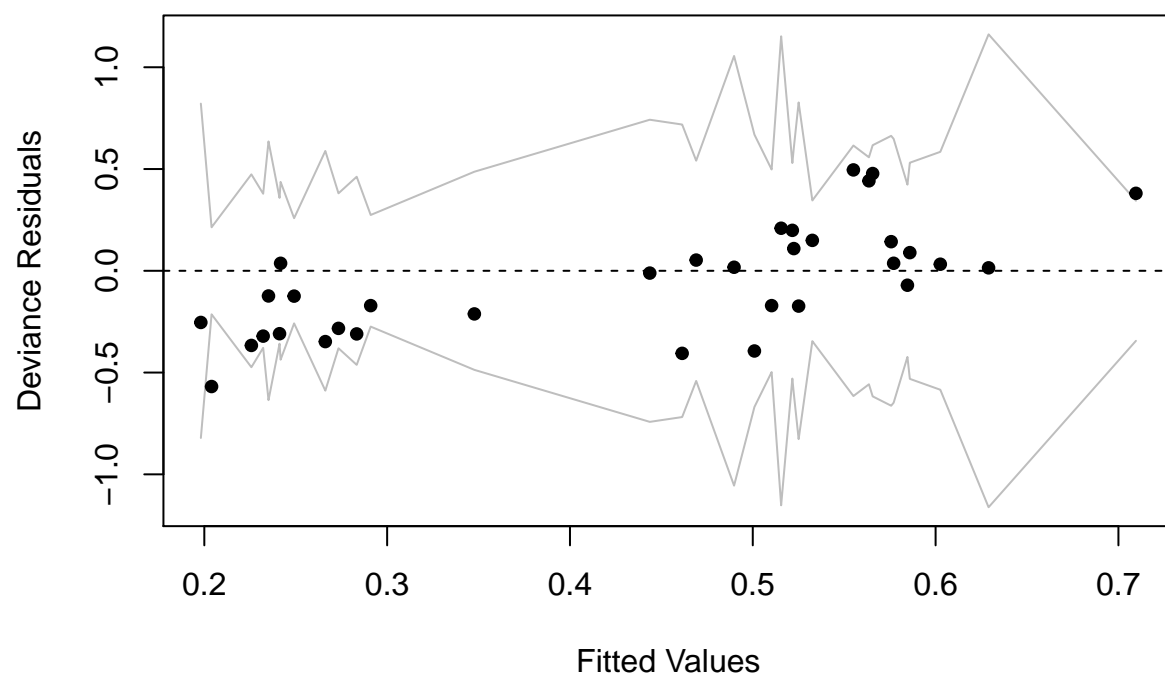
## OLS Logistic Regression Binned Residuals



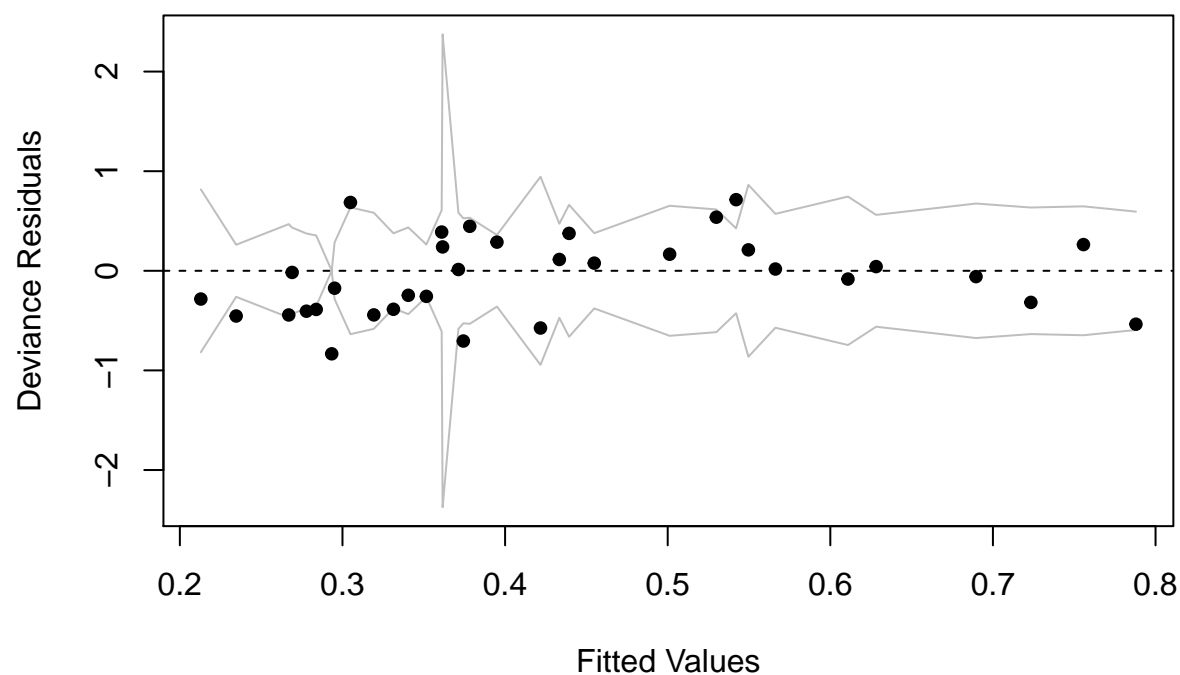
## LASSO Logistic Regression Binned Residuals



### Ridge Logistic Regression Binned Residuals



## Kernel Logistic Regression Binned Residuals



	Deviance p-value
OLS	2e-04
LASSO Penalty	1e-04
Ridge Penalty	1e-04
Kernels	0e+00

	Lower	Upper
symptom0	-1.2348	0.1283
symptom1	-0.8128	0.4192
symptom2	-0.9683	0.3673
raceother	-0.2452	0.4814
male	-0.6261	0.0439
X1	-1.6083	-0.2653
X2	-0.1101	1.2464
X3	0.1159	1.6606
X4	-0.6474	1.2667
X5	-1.0553	1.3369
X6	-926.4905	958.4814

	LASSO Estimate
(Intercept)	0.0000
symptom0	0.0000

LASSO Estimate	
symptom1	0.0000
symptom2	0.0000
raceother	0.0000
male	0.0000
X1	-1.0942
X2	0.0517
X3	0.2040
X4	0.0000
X5	0.0000
X6	1.0824

Ridge Estimate	
(Intercept)	0.0000
symptom0	-0.1794
symptom1	-0.0396
symptom2	-0.0943
raceother	-0.0503
male	-0.1487
X1	-0.5957
X2	0.2244
X3	0.3408
X4	0.0587
X5	-0.0137
X6	1.0283

	Lower	Upper
symptom0	-1.3827	-0.0953
symptom1	-0.9360	0.2222
symptom2	-1.0734	0.1903
raceother	-0.2915	0.4013
male	-0.5736	0.0674
k1	-5.6259	-0.1256
k2	5.8663	13.2598

```
##      nctdel fail male black hisp sn1 sn2 sn3 all4 race sn0
## [1,]      1    1    1    1    1    1    1    1    1    1    1 0
## [2,]      0    0    0    0    0    0    0    0    0    0    0 0
```

**Histogram of  $\log(\text{data.imp\$nctdel} + 0.1)$**

