

PDF

0.14  
0.12  
0.1  
0.08  
0.06  
0.04  
0.02  
0

-40

-20

0

20

40

60

$$\Delta \chi^2 = \chi_{H_0}^2 - \chi_{H_1}^2$$

$H_0$   
 $H_1$

+2 $\sigma$ +1 $\sigma$ 

Median

-1 $\sigma$ -2 $\sigma$ +2 $\sigma$  $1-\beta(0.977) \propto (0.318 \mid 0.5\sigma)$ +1 $\sigma$  $1-\beta(0.841) \propto (0.084 \mid 1.4\sigma)$ 

Median

 $1-\beta(0.500) \propto (0.014 \mid 2.2\sigma)$ -1 $\sigma$  $1-\beta(0.159) \propto (0.002 \mid 3.0\sigma)$ -2 $\sigma$  $1-\beta(0.023) \propto (10^{-4.22} \mid 3.8\sigma)$