• Blue: left chiral model
• Red: right chiral model
What I did

- Simulations: 100,000
- Events per simulation: 250
- Change events per simulation and find a line based on alpha < 0.05
- Find 1-beta or power based on that and plot it
power vs statistics

- Results to the left
- Based on toy model, we would need \( n \sim 47 \) to get better than 50% power
- What actual models should I use, and what criteria should we use as acceptable?
MC simulated distributions

- Simulations: 100,000
- events per simulation: 100
MC simulated distributions

- Simulations: 100,000
- events per simulation: 1,000
• Simulations: 100,000
• events per simulation: 10,000
MC simulated distributions

- Simulations: 100,000
- events per simulation: 50
MC simulated distributions

- Simulations: 100,000
- events per simulation: 10
• Simulations: 100,000
• events per simulation: 10