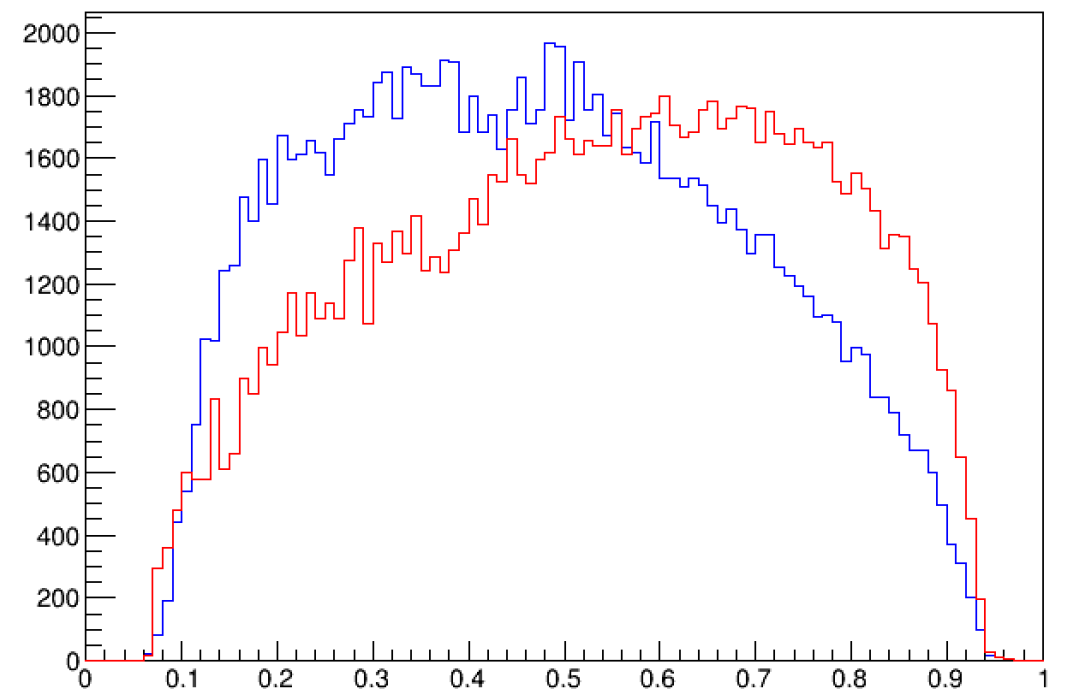


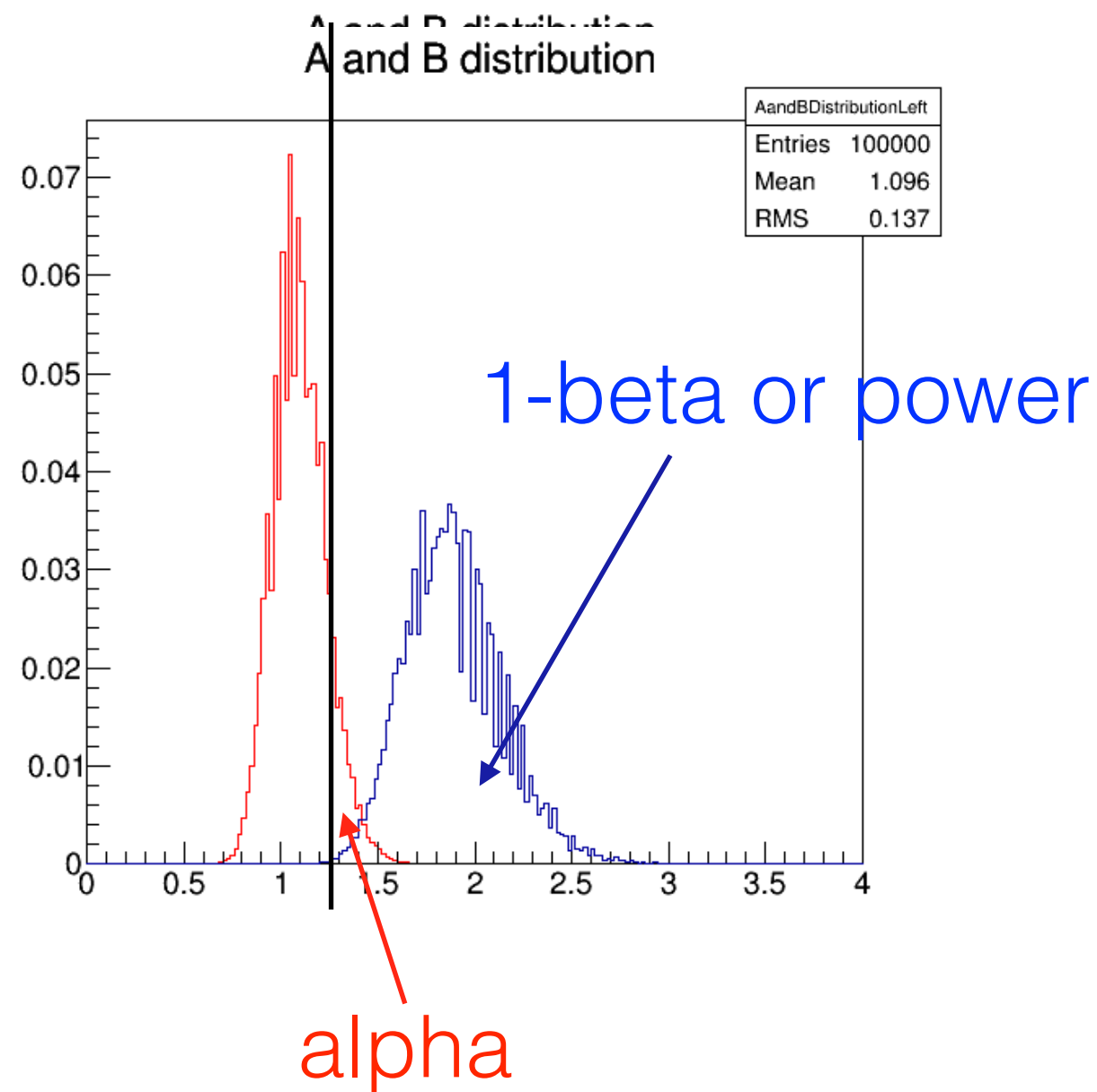
MC simulated distributions

- Blue: left chiral model
- Red: right chiral model



What I did

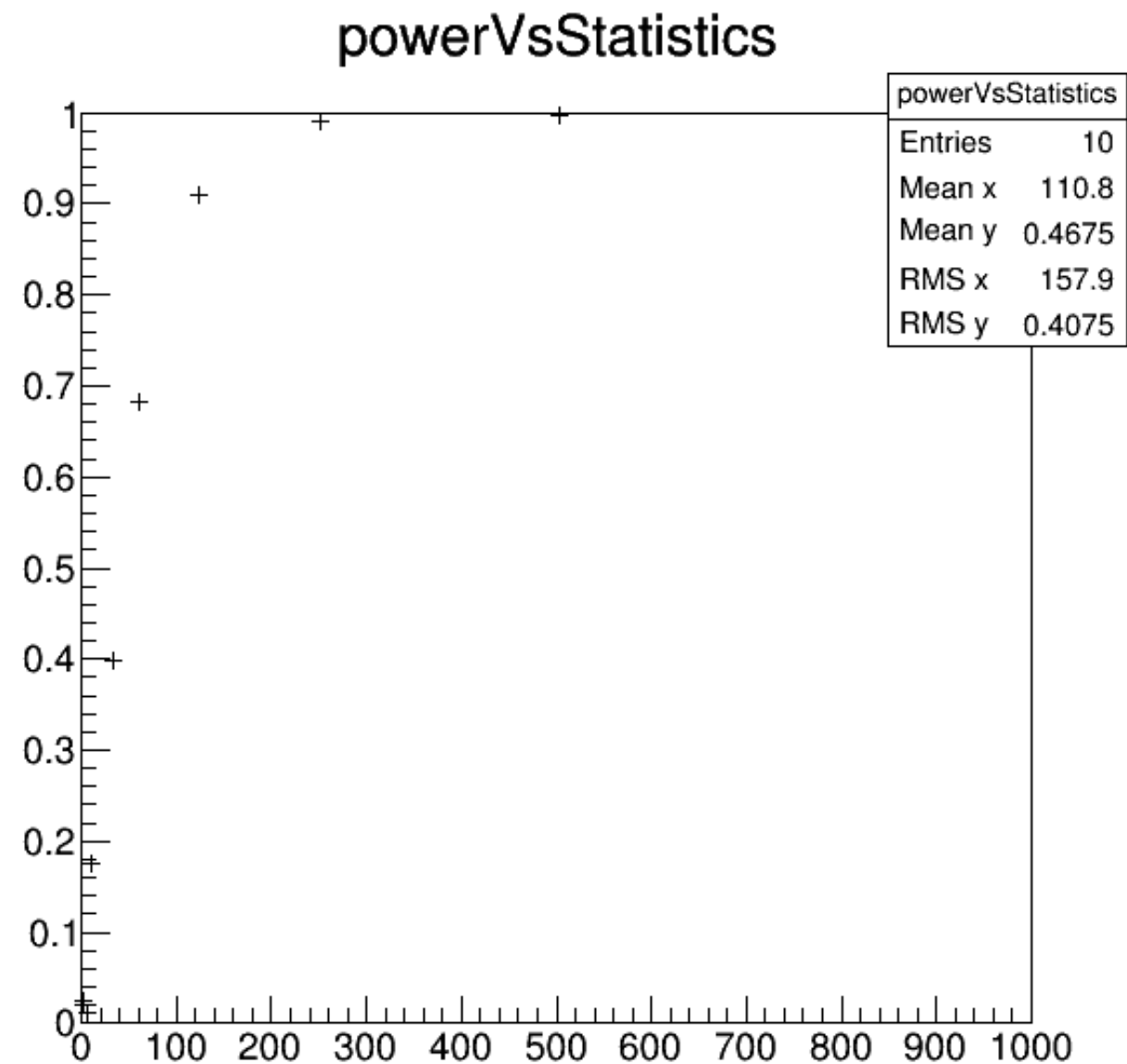
- Simulations: 100,000
- events per simulation: 250
- Change events per simulation and find a line based on $\alpha < 0.05$
- Find 1-beta or power based on that and plot it





power vs statistics

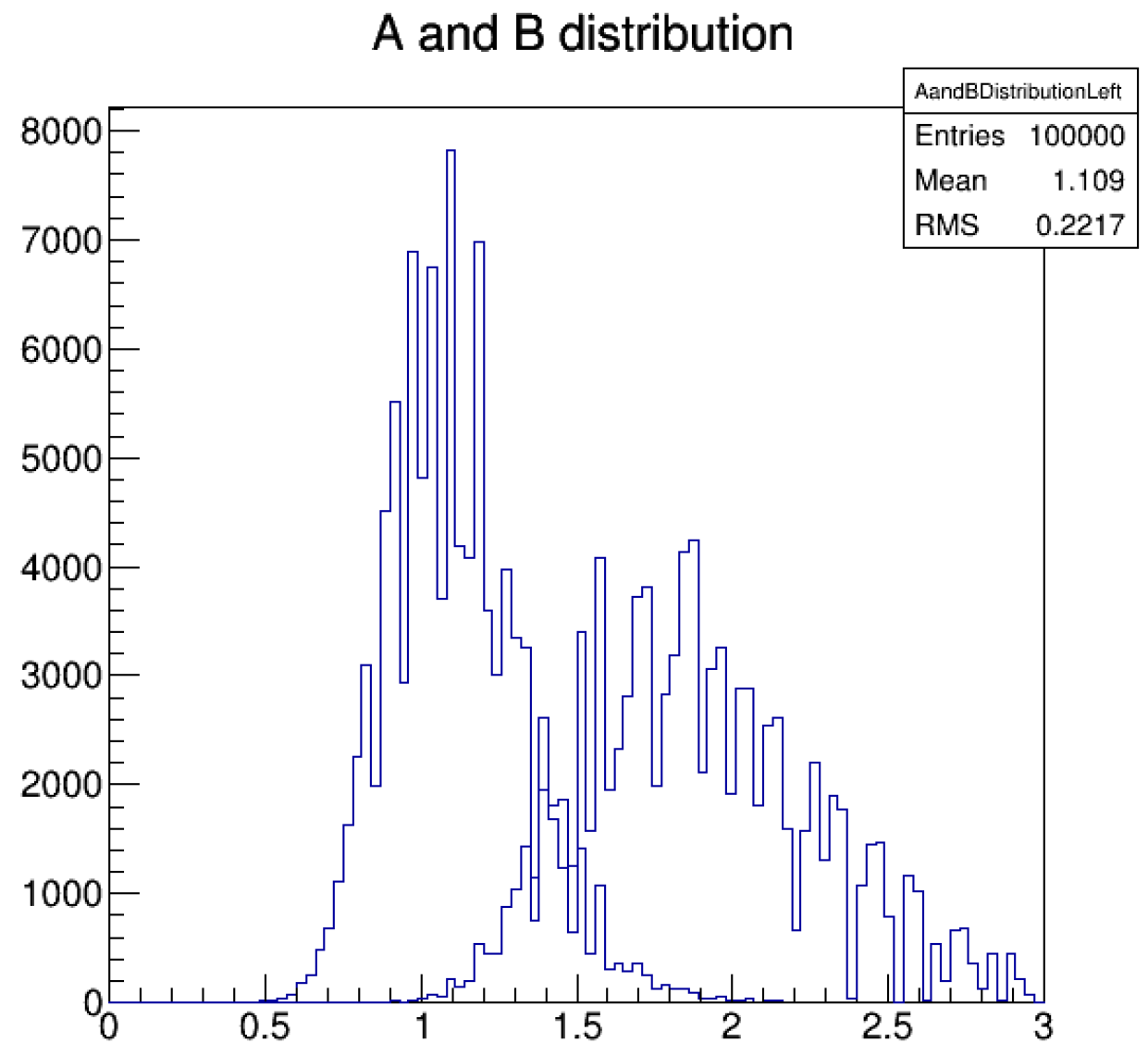
- Results to the left
- Based on toy model, we would need $n \sim 47$ to get better than 50% power
- What actual models should I use, and what criteria should we use as acceptable?





MC simulated distributions

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

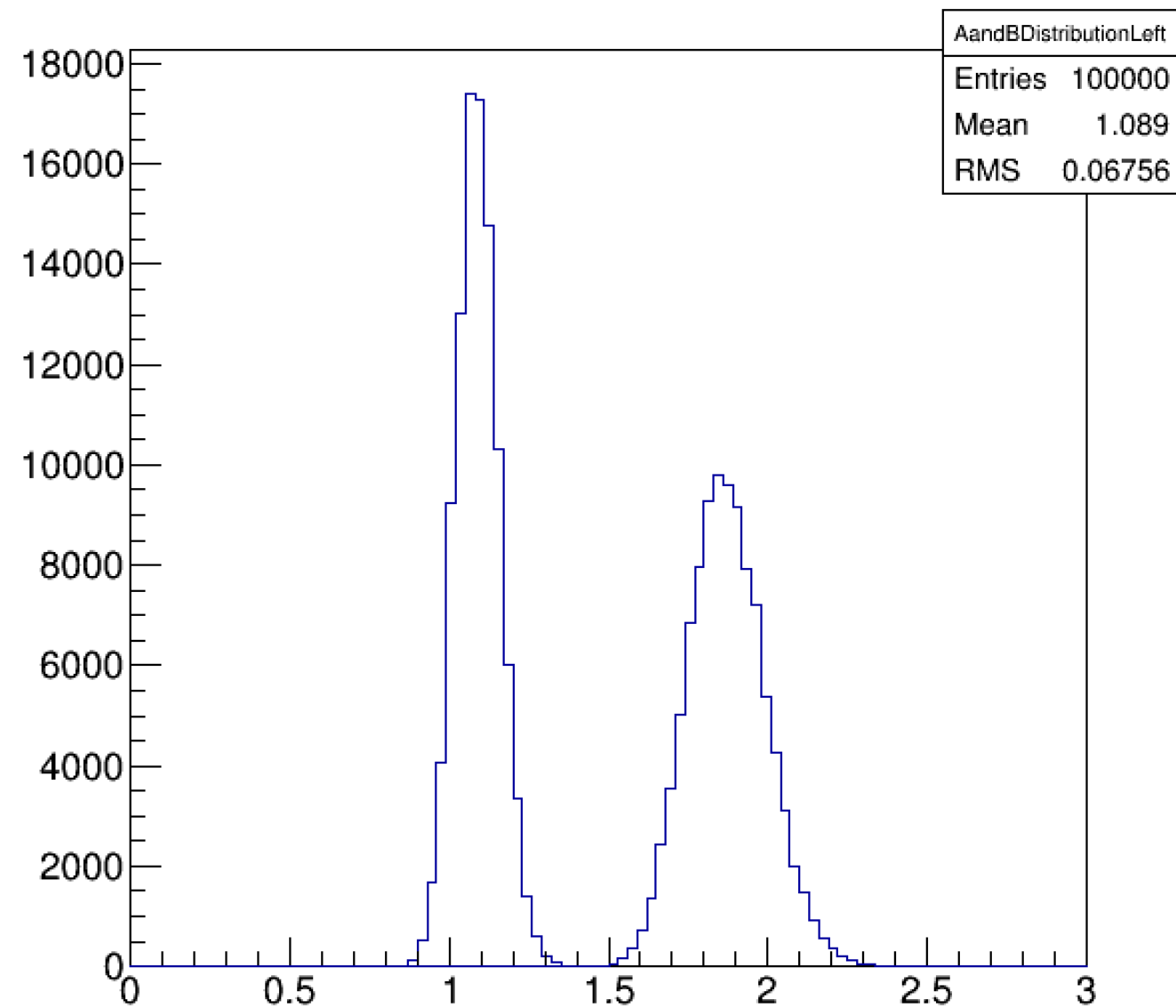




MC simulated distributions

- Simulations: 100,000
- events per simulation: 1,000

A and B distribution

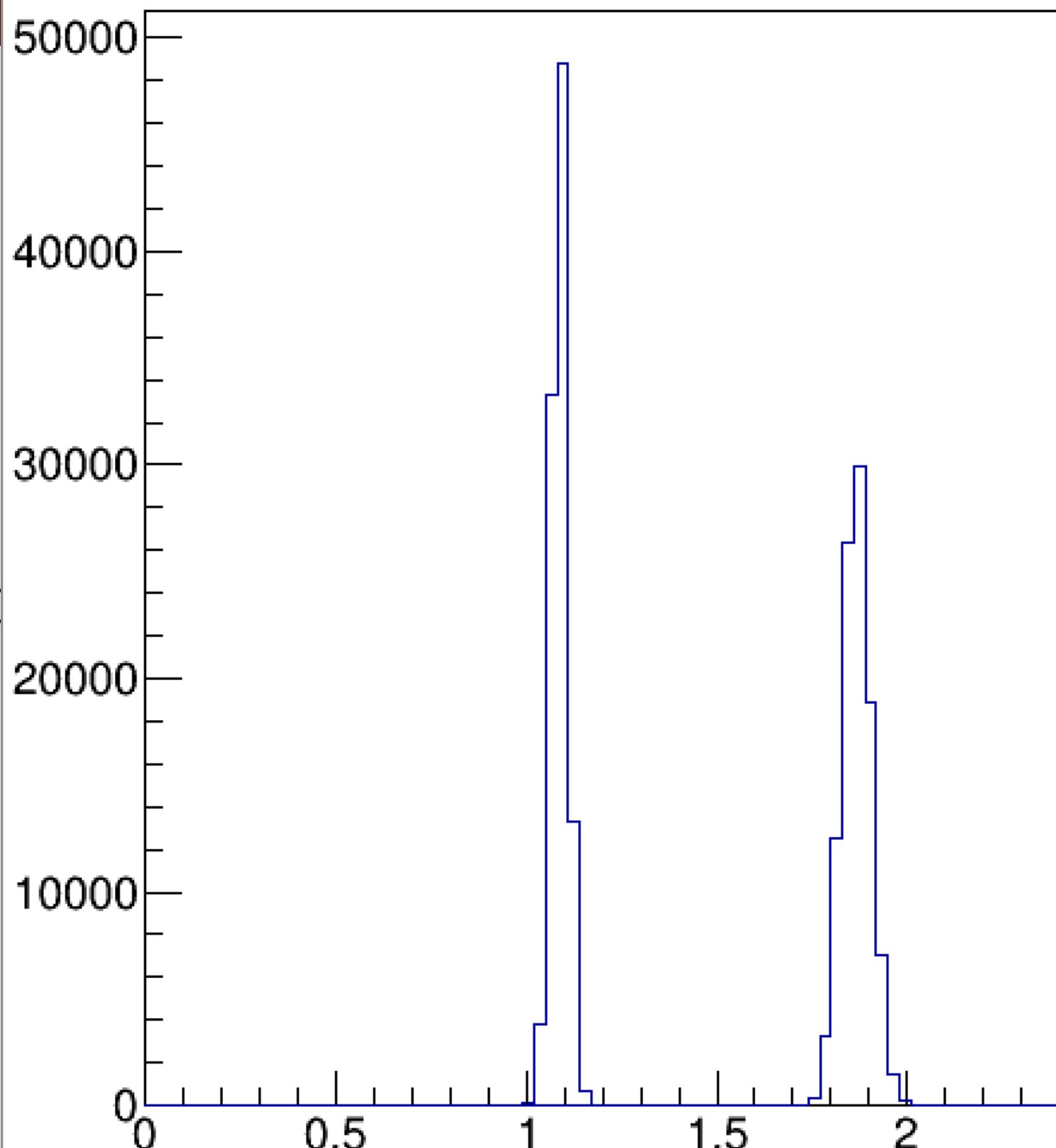




MC simulation

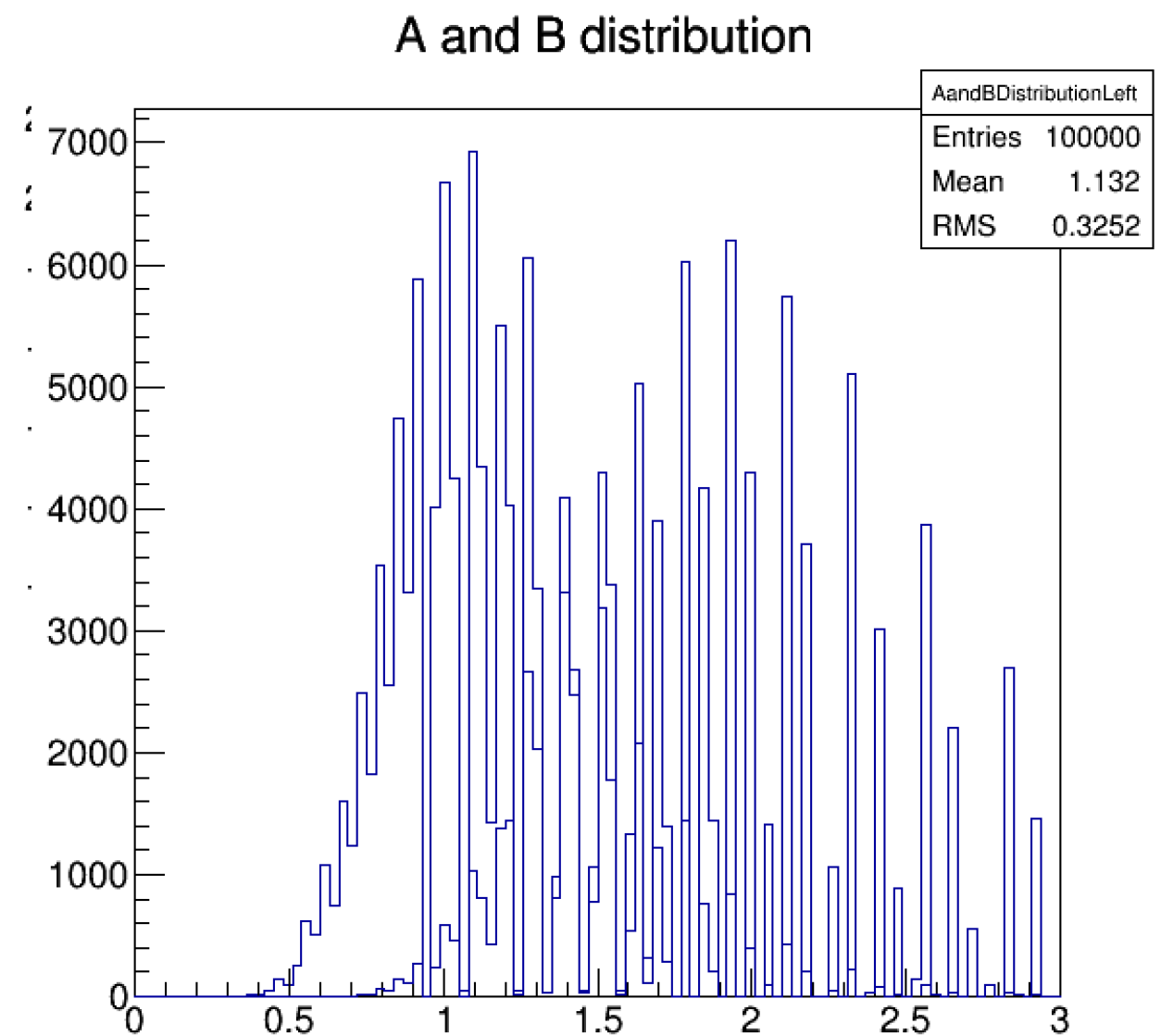
- Simulations: 100,000
- events per simulation: 10,000

A and B distribution



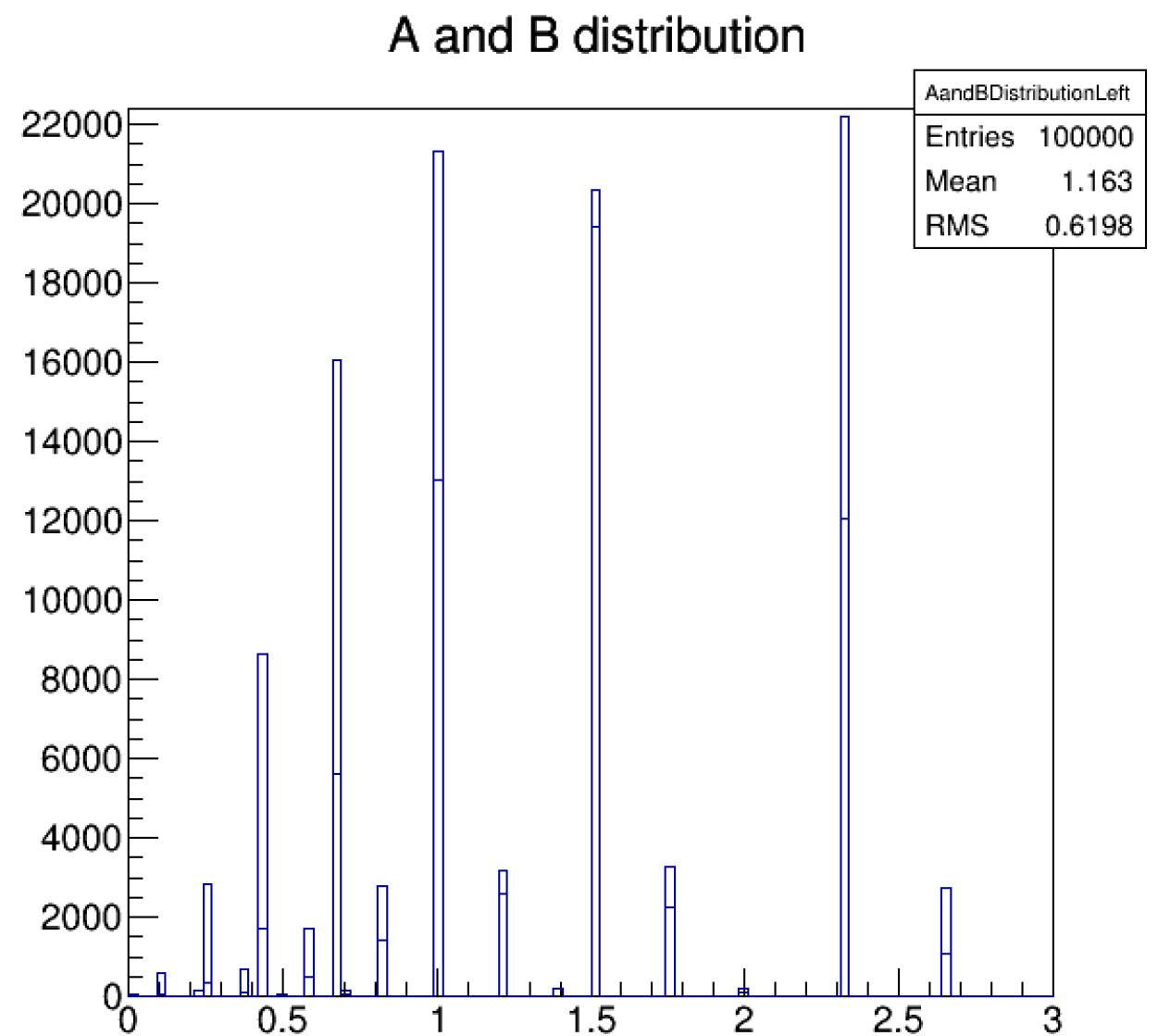
MC simulated distributions

- Simulations: 100,000
- events per simulation: 50



MC simulated distributions

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



MC simulated distributions

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

