

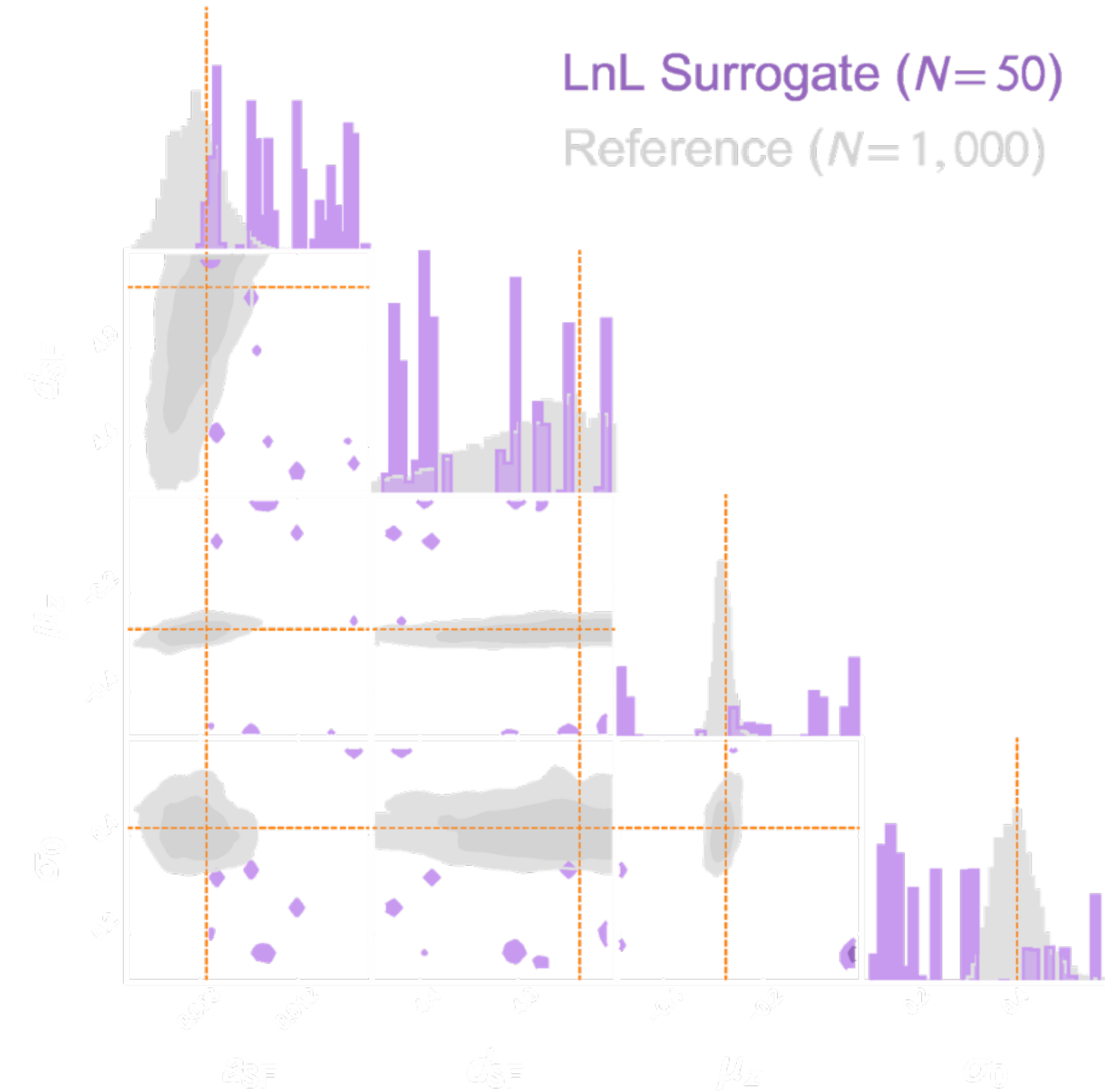


- Forward population modelling challenging
- GP surrogate for LnL can help
- GP surrogate can use fewer training points to obtain similar posteriors
- ***Some Drawbacks:***
 - Need to retrain for new data
 - Tuning parameters?

- Build a better acquisition function
- Increase Δ
- Determine COMPAS population sizes needed for different Δ

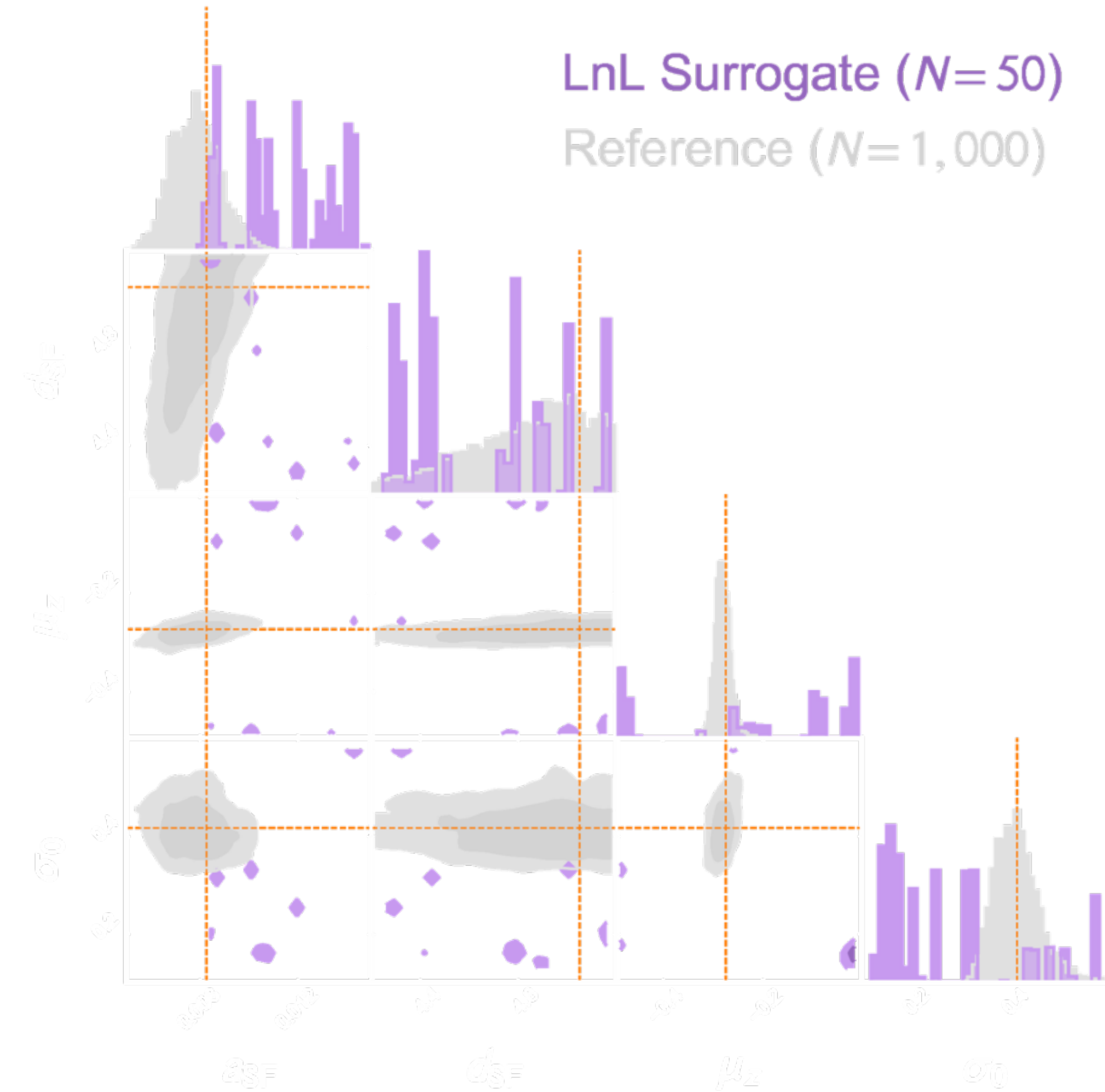
LnL Surrogate ($N=50$)

Reference ($N=1,000$)



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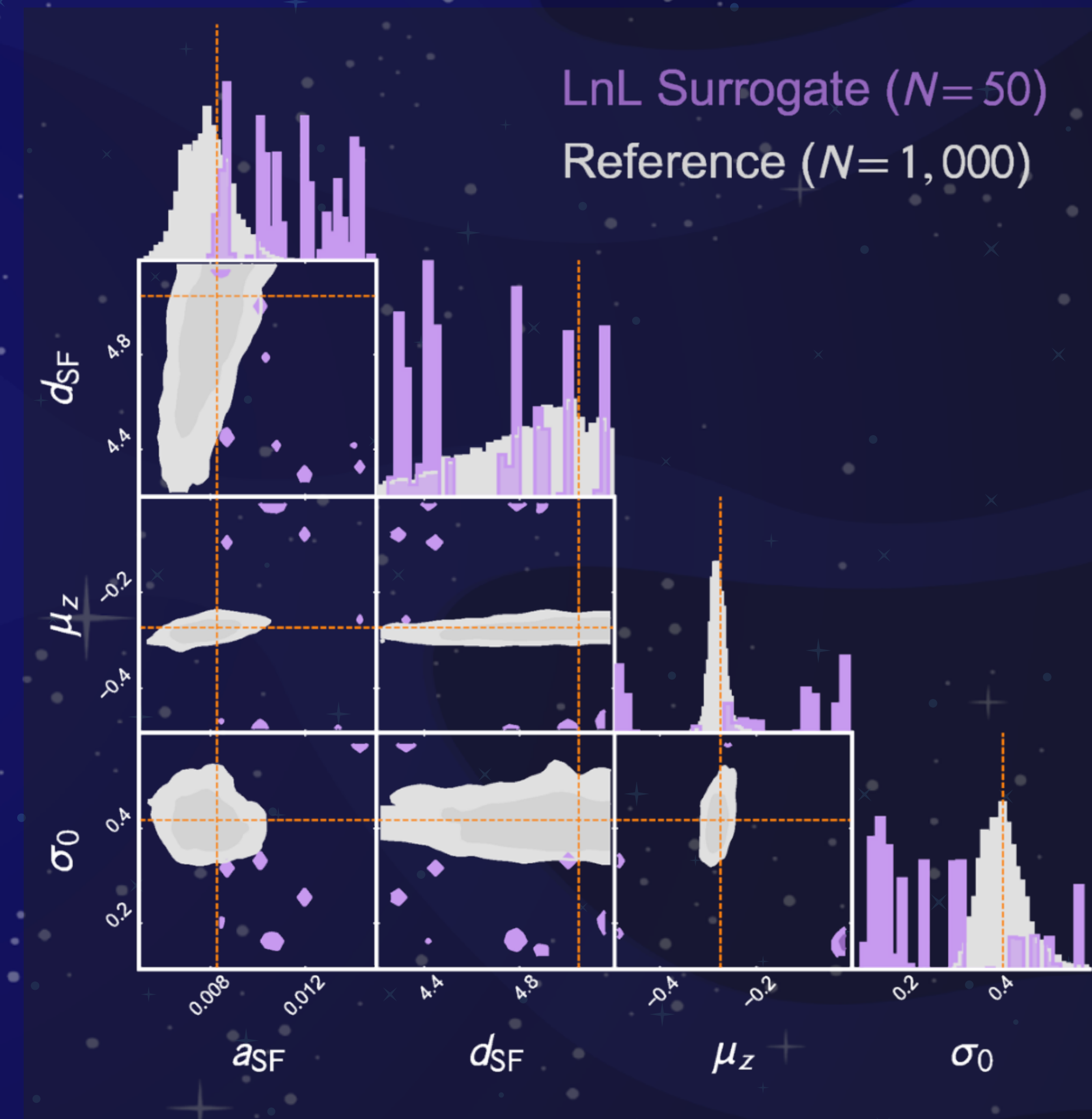


Summary

- Forward population modelling challenging
- GP surrogate for LnL can help
- GP surrogate can use fewer training points to obtain similar posteriors
- ***Some Drawbacks:***
 - Need to retrain for new data
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Future Work

- Build a better acquisition function
- Increase Λ
- Determine COMPAS population sizes needed for different Λ



EXTRA PLOTS