

Surrogate Modelling of the Tritium Breeding Ratio

Petr Mánek Graham Van Goffrier

Centre for Doctoral Training in Data Intensive Science University College London

22nd June 2020





Tritium Breeding in ICF Reactors



Problem Description



Data Generation



Dimensionality Reduction



Methodology



Outline



Experiments 1 & 2: Hyperparameter Tuning





Experiment 3: Scaling Benchmark



Experiment 4: Model Comparison



The QASS Algorithm



Application on Toy Theory



Conclusion

