



Magnet Design Optimisation with Supervised Deep Neural Networks

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Magnet Dataset

train



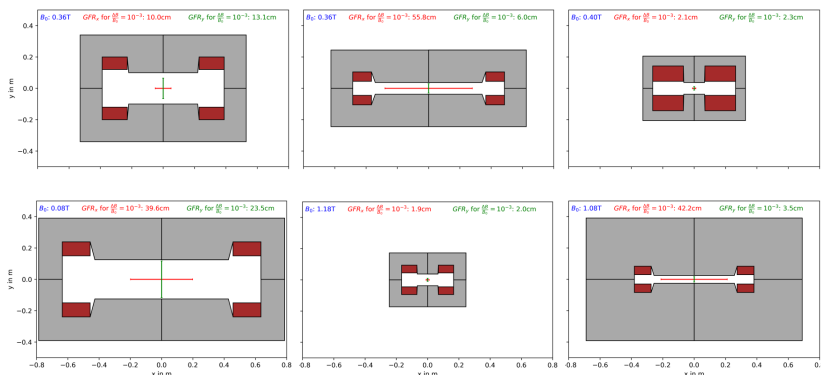
Deep Neural Network

plug into



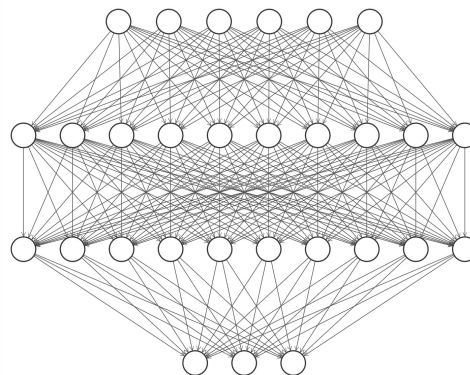
Optimiser

60.000 samples created and simulated



Extract Specifications that they meet from Finite Element Method Simulation

Design Parameters



Specifications

Design magnet with Specifications:
 $B_0 = 1.5 T$, $GFR_x > 2 cm$, $GFR_y > 1 cm$ for $\frac{\Delta B}{B_0} = 10^{-3}$

