

# Fluoride-Salt-Cooled High-Temperature Reactor Generative Design Optimization with Evolutionary Algorithms Ph.D. Final Defense

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August 12, 2022



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**Additive manufacturing could radically transform reactor design.**

I propose to:

- Model the Fluoride-Salt-Cooled High-Temperature Reactor's (FHR) neutronics and thermal-hydraulics and participate in the FHR benchmark
- Design an optimization tool that generates new 3D-printing enabled optimal reactor designs
- Use optimization tool to generate optimal non-conventional FHR designs

