

Adaptive Design and Criticality Analysis of the DARWIN Reactor Core Concept

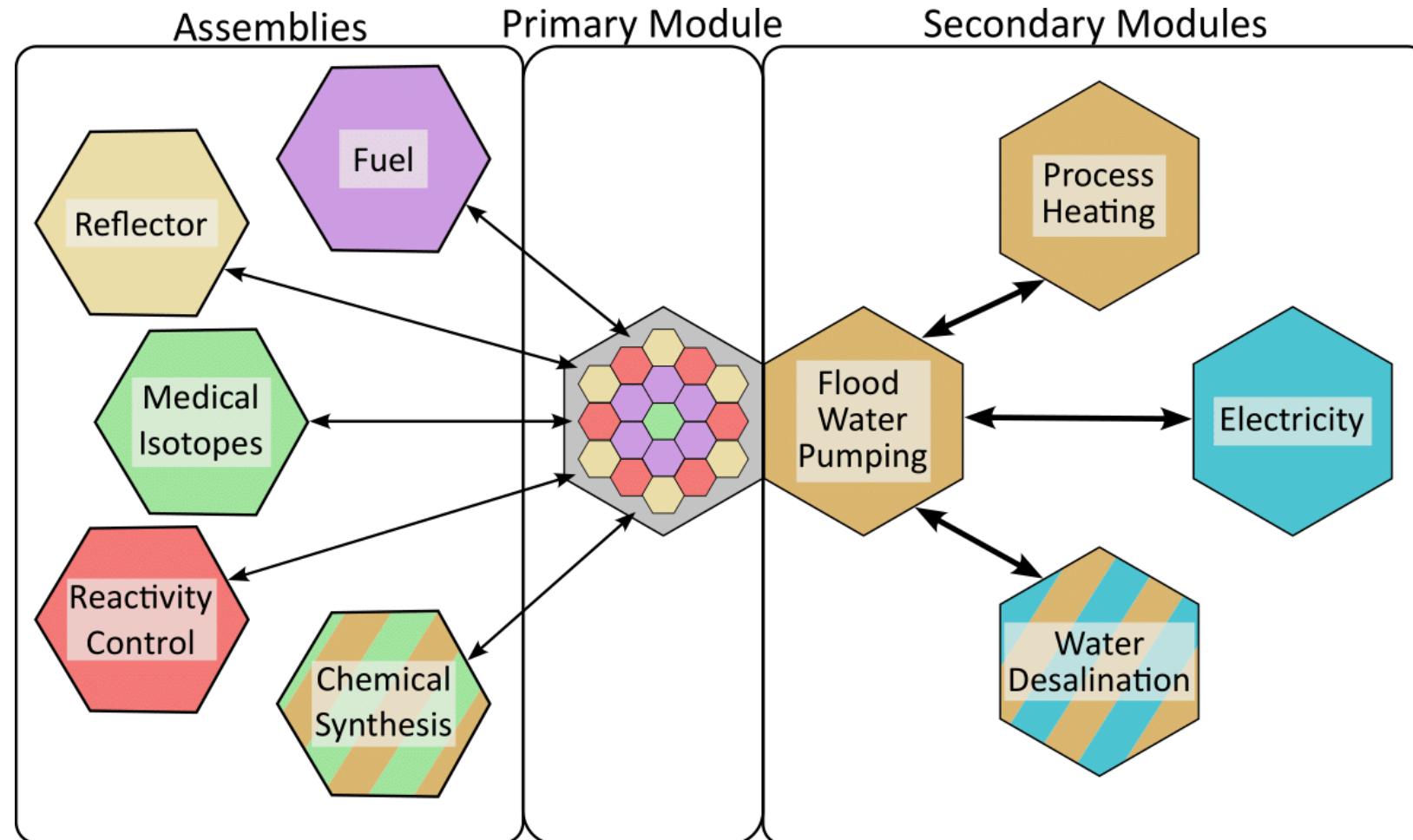
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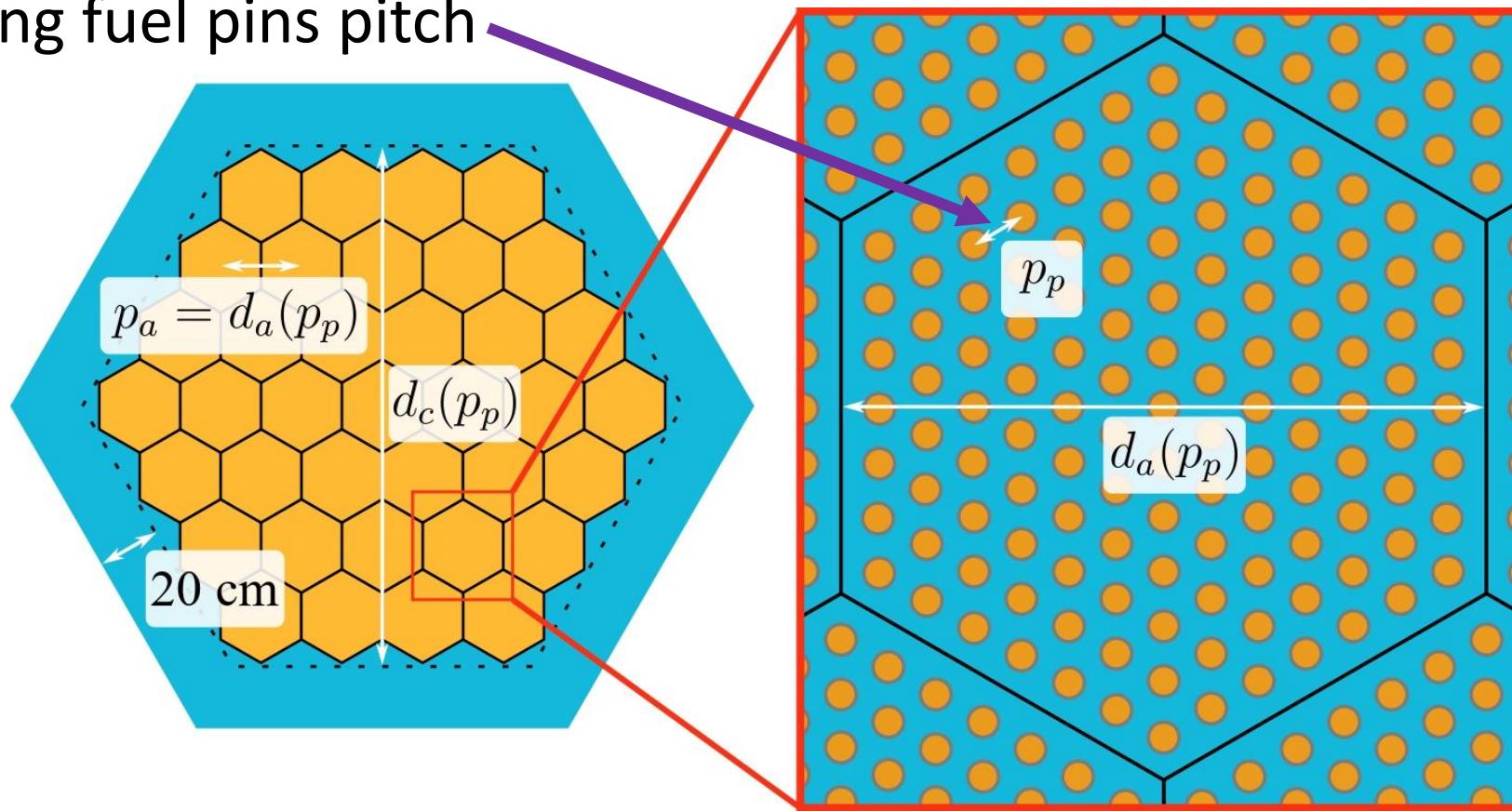
Motivation

- Adaptive design for flexible needs
- Dispatchable Adaptive Reactor With Interchangeable components



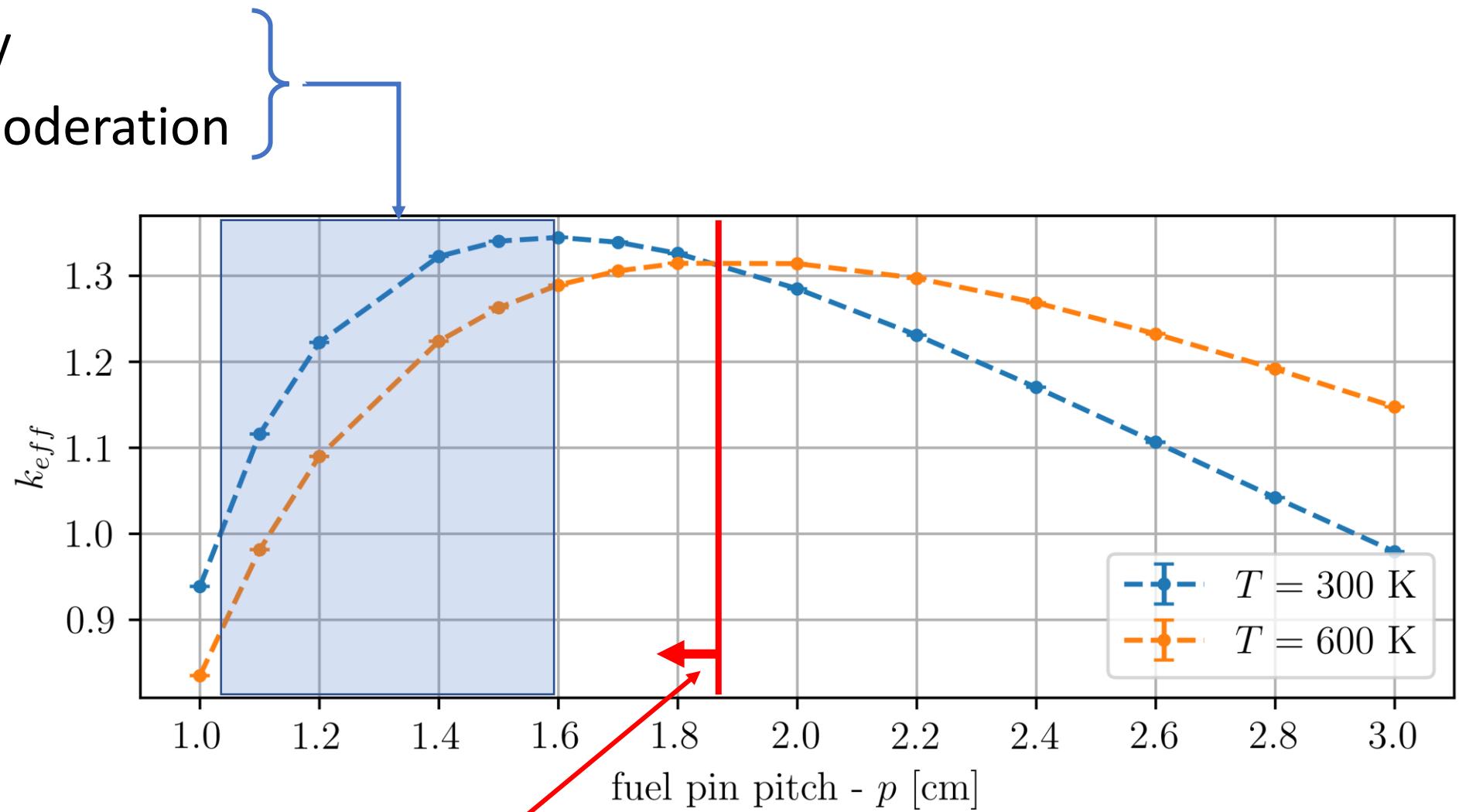
Computational analysis

- 2D
- Changing fuel pins pitch



Conclusions

- Criticality
- Under-moderation



- Negative temperature effect