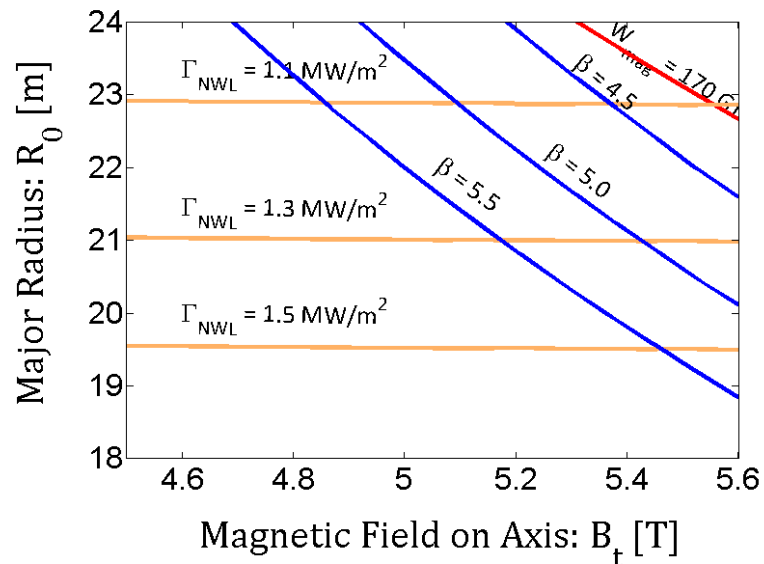
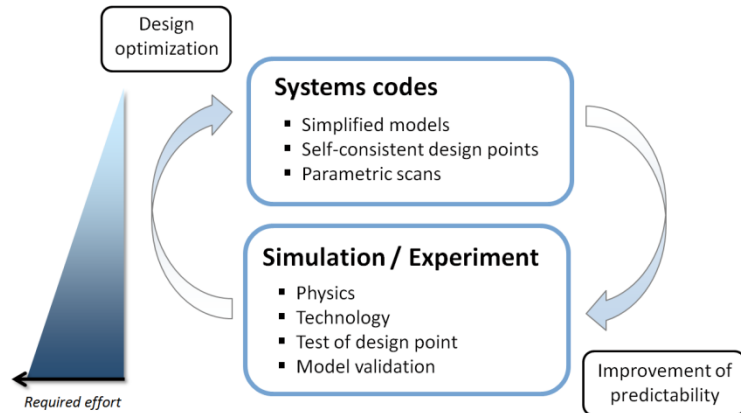


# Integrated Concept Development of Next-Step Helical Axis Advanced Stellarators



FIP/P7-9

Felix Warmer



## Overview

- Systems Codes models have been developed and tested for the HELIAS concept
- Detailed transport simulations are employed to describe the plasma confinement

## Integrated Design Analysis

- Engineering and Physics tools are coupled indirectly using results as input for each other
- Several iterations forth and back lead to a consistent design
- low calculation time of a single design point allow to carry out sensitivity studies over a wide parameter space and optimisation
- Evolving method, but valuable tool to prepare designs for the next-step devices



Max-Planck-Institut  
für Plasmaphysik  
EURATOM Association



This work has been carried out within the framework of the EUROfusion Consortium and has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 633053. The views and opinions expressed herein do not necessarily reflect those of the European Commission.