Dealing with uncertainties in fusion power plant conceptual development

• In designing a fusion power plant we must understand the expected performance as well as the nominal design performance.
• This allows the identification of uncertain parameters that have the largest effect on overall uncertainty.
• By focusing research effort in these areas, we can increase confidence in plant design performance, and reduce operational margins (and therefore costs).

Understanding what limits plant performance in different parts of operational space also allows performance margins to be properly assessed.

Overall aim is to develop ways of finding fully robust DEMO designs which we can be confident will perform as expected.


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