



The Gauss Fusion Power Plant

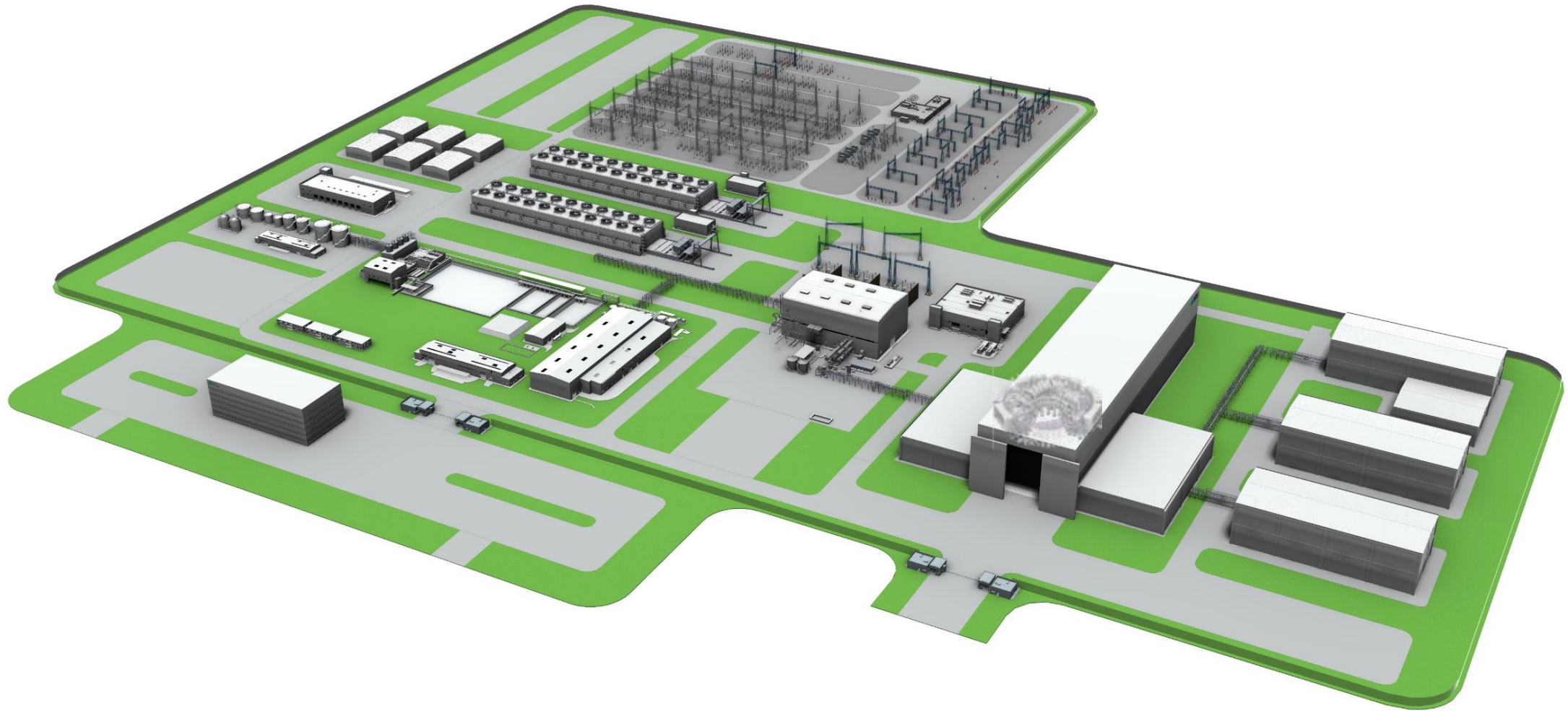
6th Forum FUSION Germany

January 14th, 2025

Samuel Lazerson (Stellarator Physics Lead)

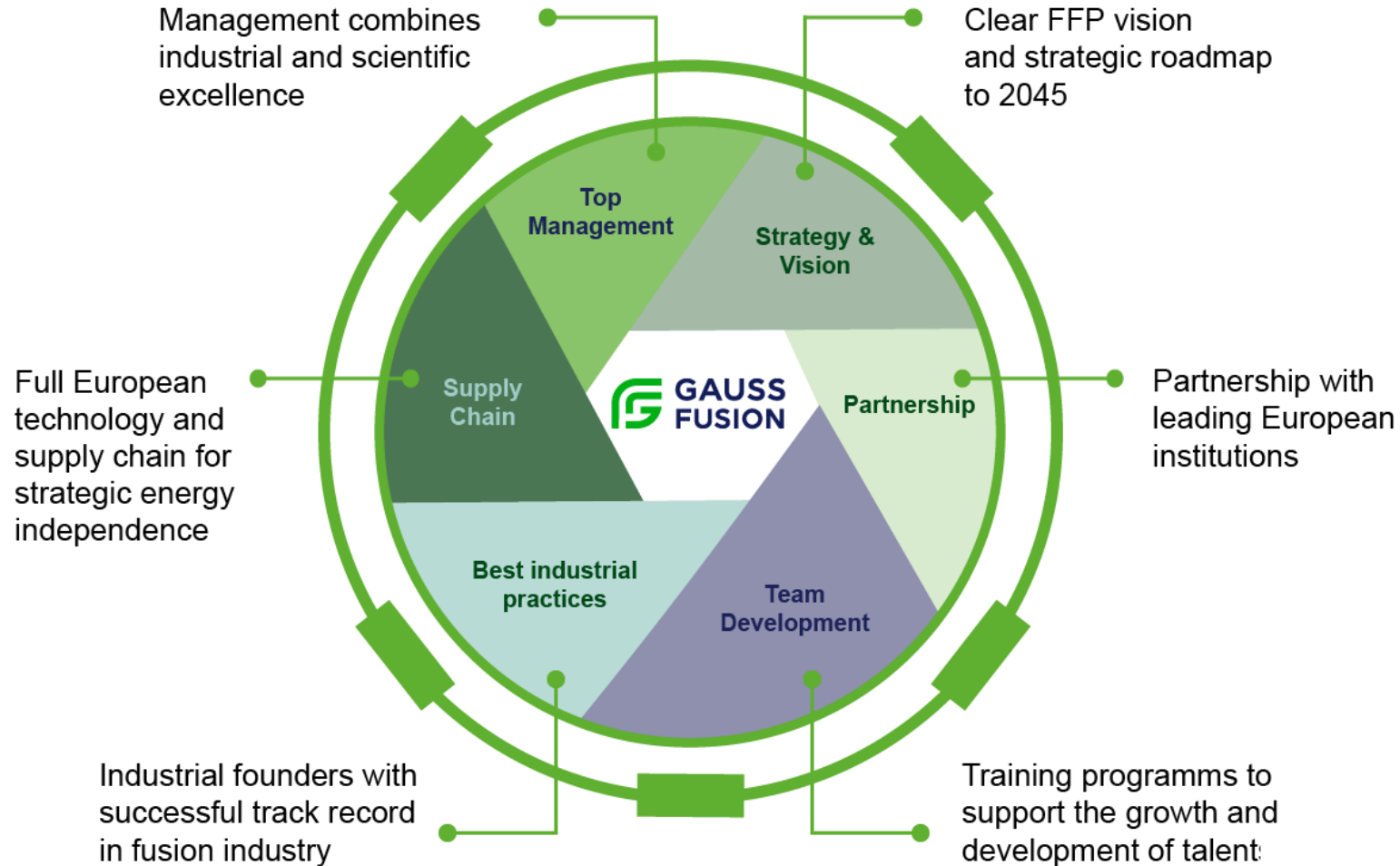
THE GIGA FUSION POWER PLANT

1 GW electrical continuous power output by early 2040s



FUSION WITH INTEGRITY

Founders and Strategic Partners

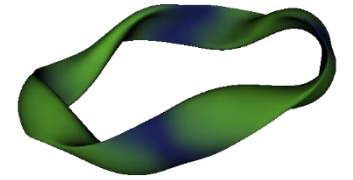


Partnerships

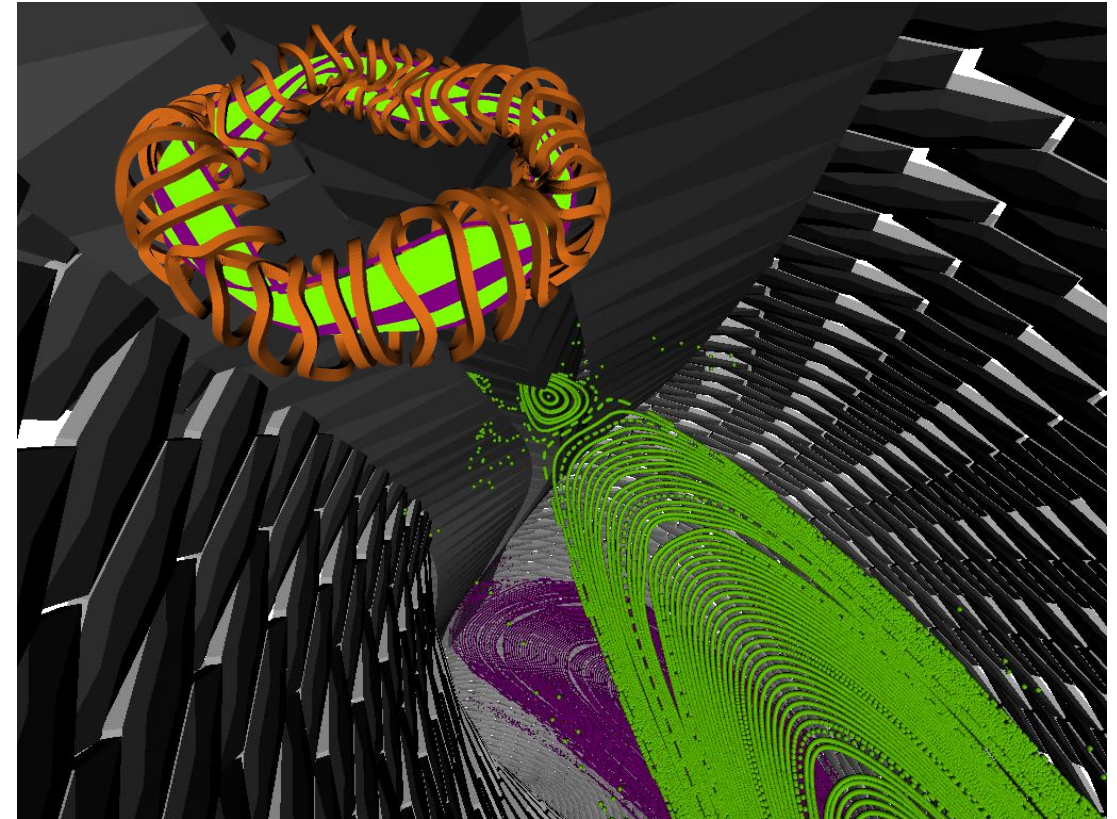
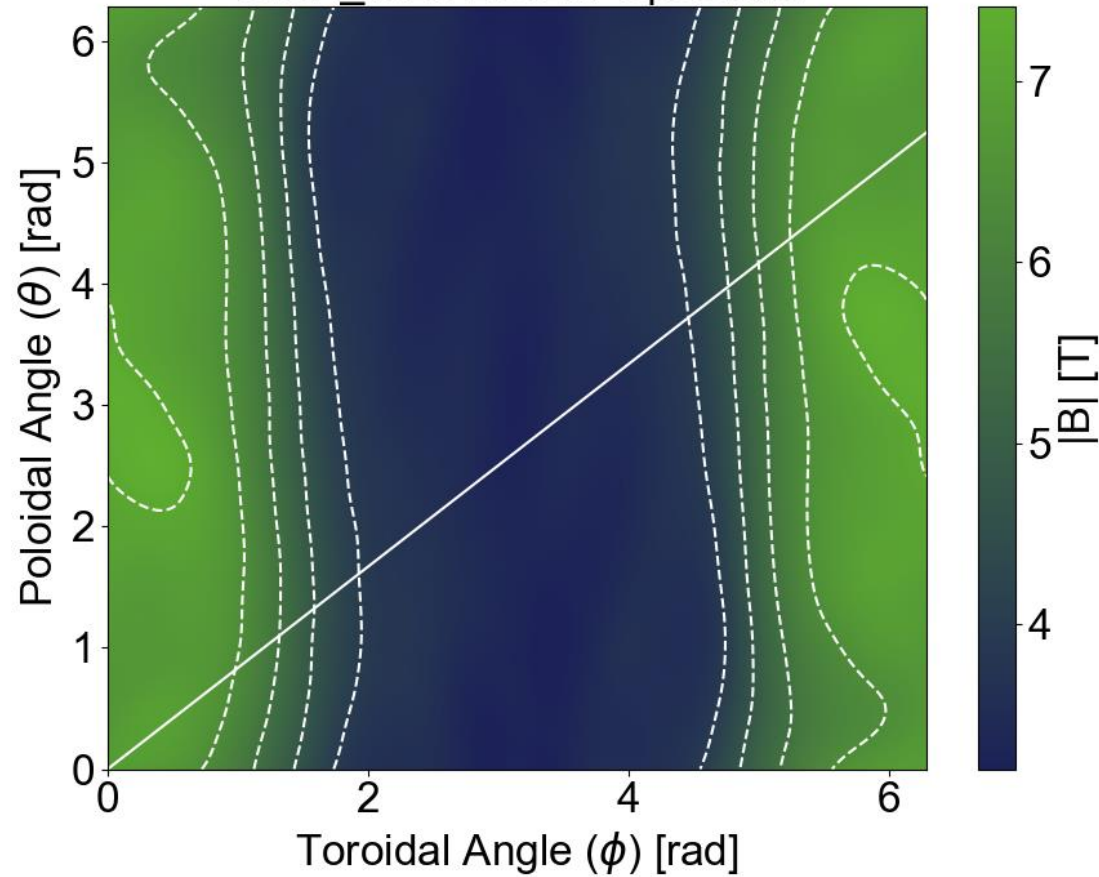


GIGA plasma design is focused on a 4 period quasi-isodynamic stellarator

Optimization builds on W7-X considering QI, stability, and turbulence



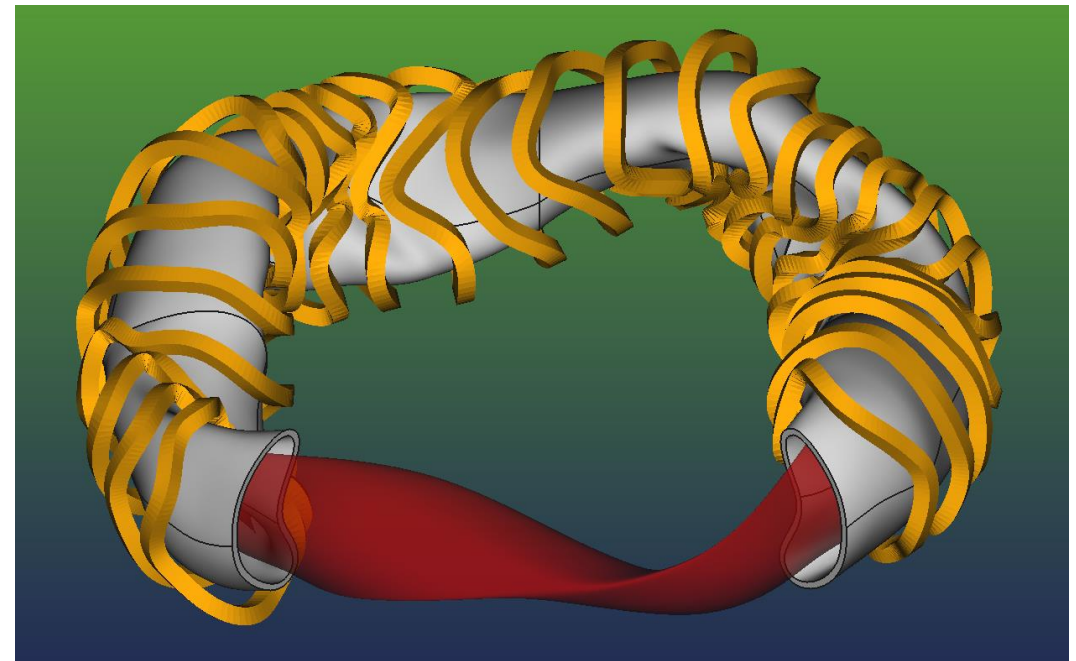
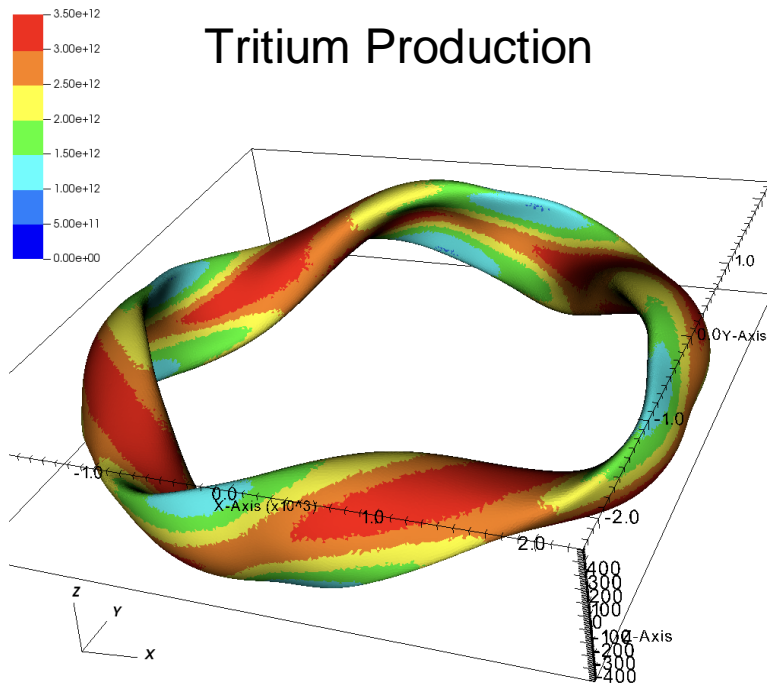
GIGA_v320 Boozer Spectrum



Neutrons and component lifetimes inform engineering choices

Fusion neutrons place challenging criterion on device design

- 40 FPY Machine lifetime (Vacuum vessel)
- Vacuum vessel as tritium barrier
- Water shielding and breeding space needed



The time is now