Overview of the FACETS project and Lessons Learned for the FSP

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The Framework Application for Core-Edge Transport Simulation (FACETS) is developing an infrastructure for performing transport simulations from the core to the edge. This infrastructure allows for modeling of tokamak plasmas on a range of architectures, from laptops to supercomputers, while enabling the reuse of legacy components for cost savings. Meeting these challenges has required the collaboration of fusion scientists with the applied mathematics and computer science community. In this presentation, we review the lessons learned from the FACETS project, including these collaborations, and discuss implications for the Fusion Simulation Program.

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