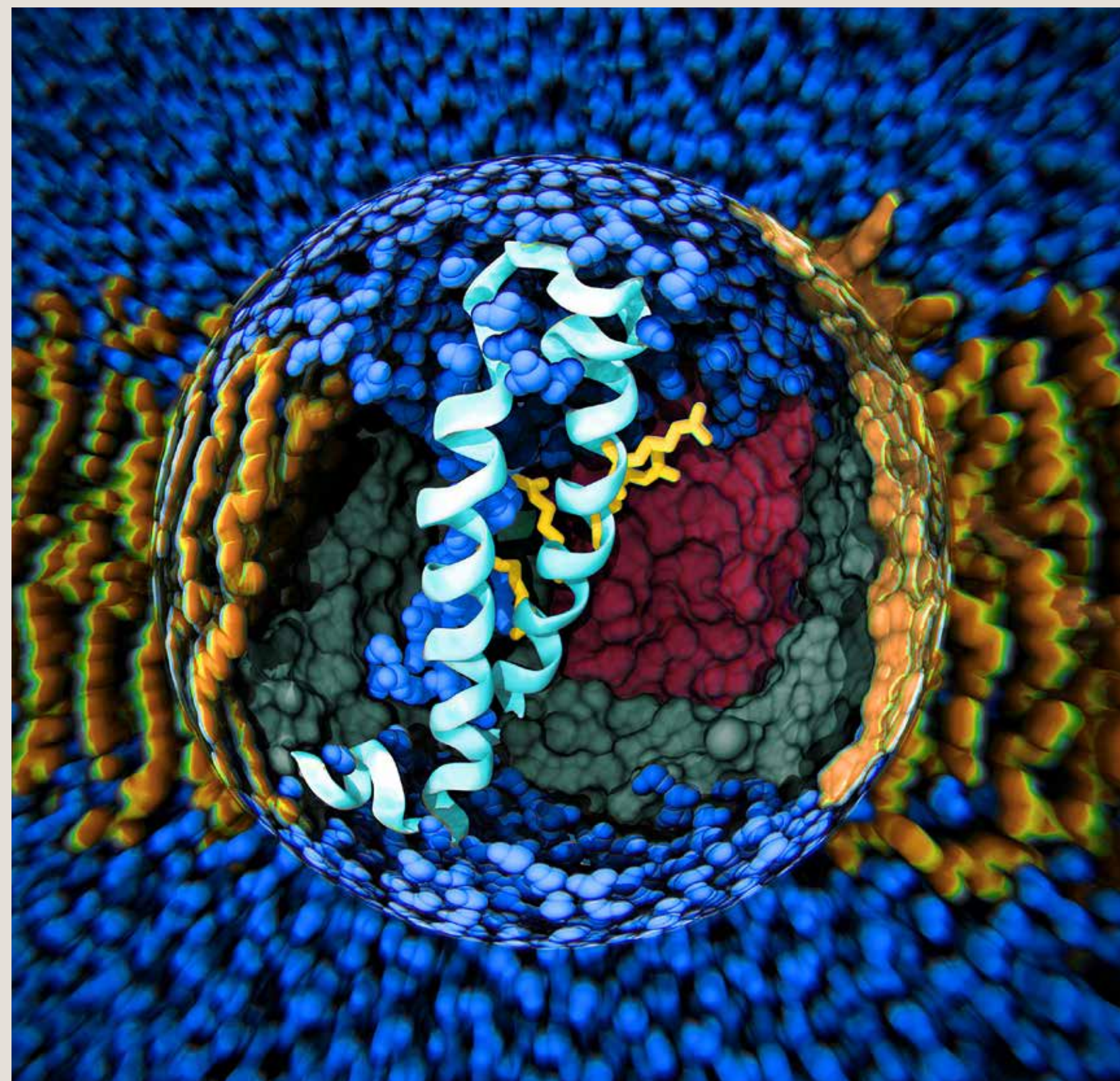


HPC Centres of Excellence

The EuroHPC Joint Undertaking and the member states are funding twelve Centres of Excellence (CoEs) in high-performance computing (HPC) to support and further develop strategic scientific domains. PDC leads three of the CoEs and is a partner in a fourth.

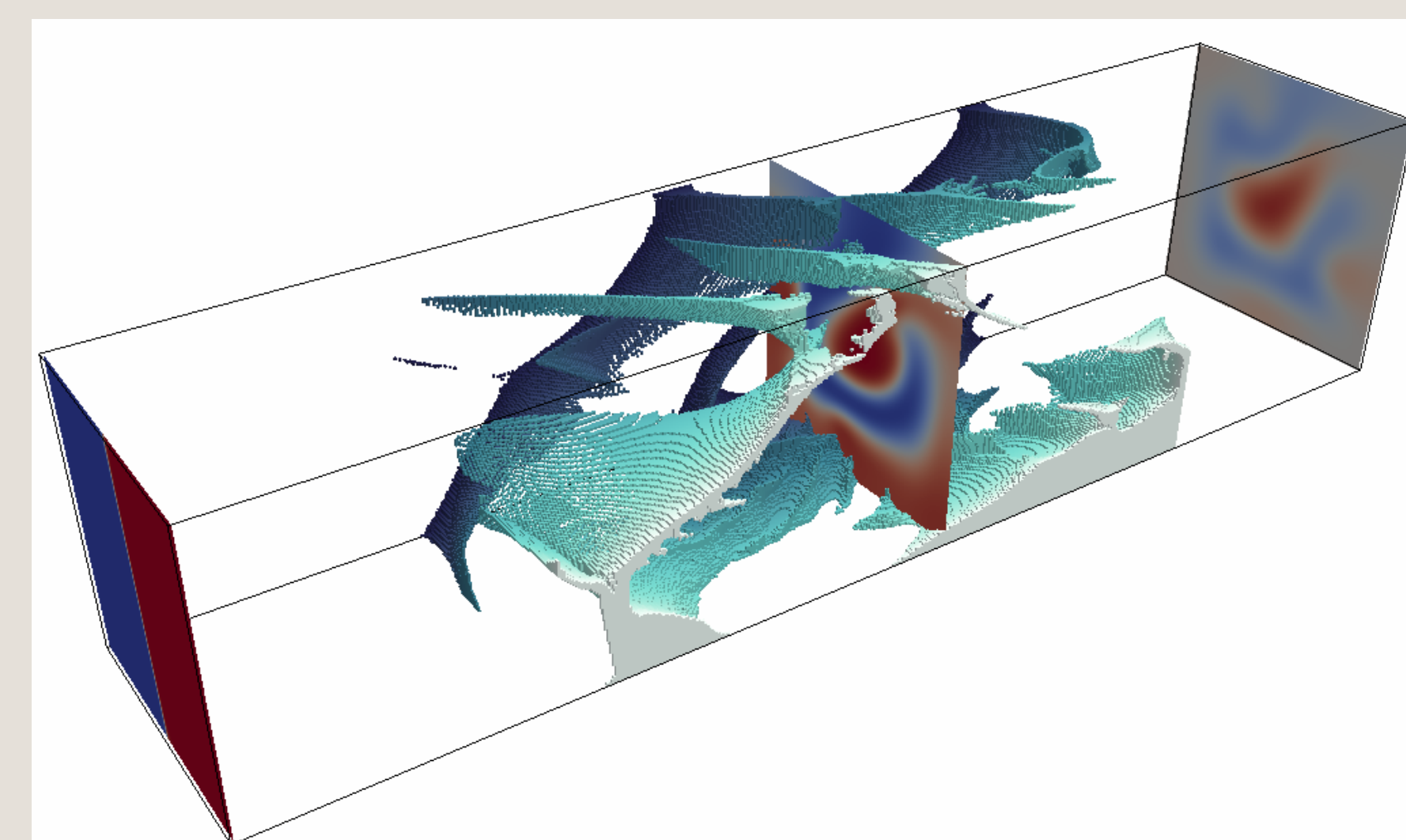


BioExcel is the European Centre of Excellence for computational biomolecular research. It was established in 2015 and has grown into a major research and innovation hub providing open-source modelling and simulation software, user support, training and community-building events for life sciences researchers.



Centre of Excellence in Exascale CFD

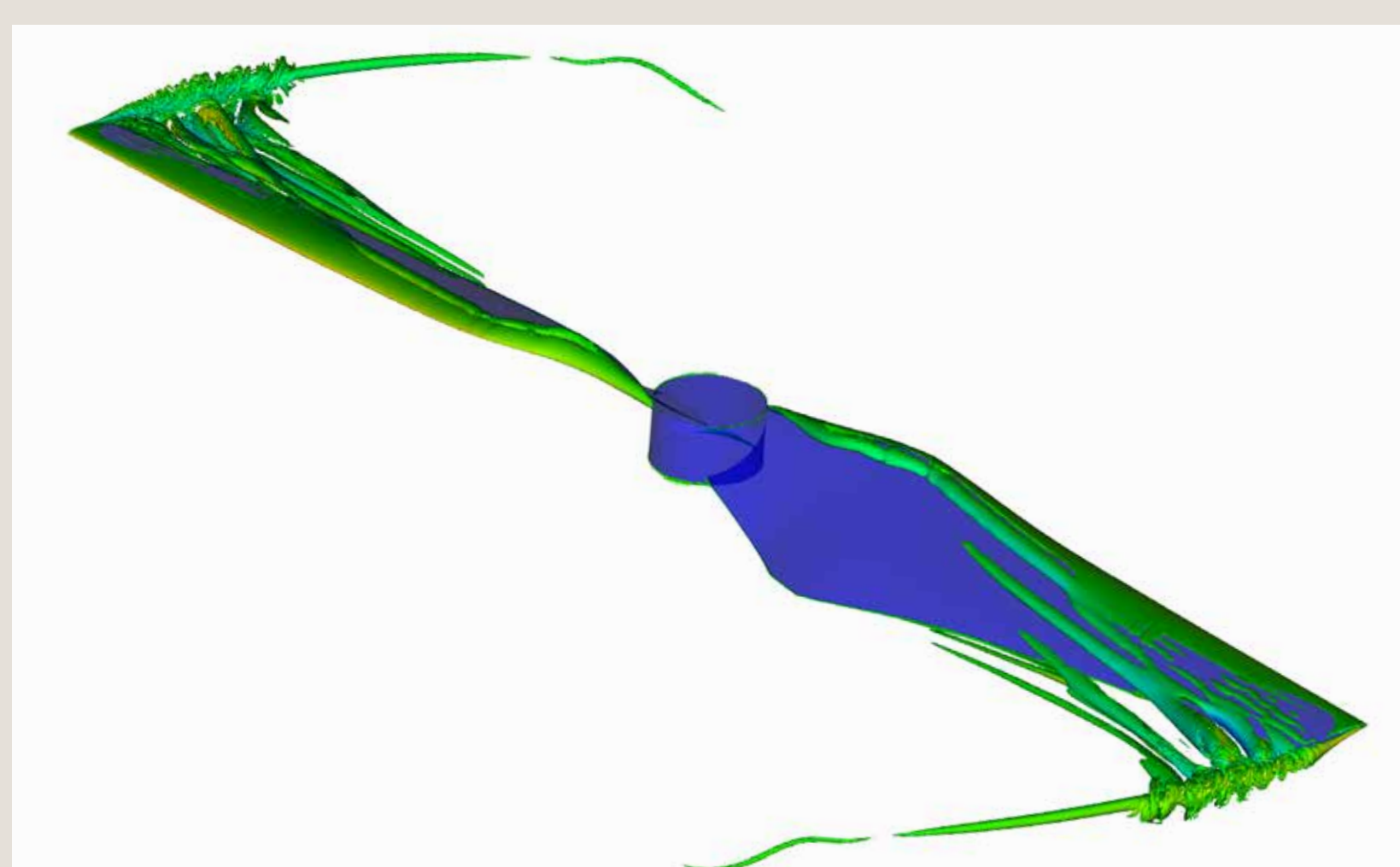
CEEC implements exascale-ready workflows for addressing relevant Computational Fluid Dynamics (CFD) challenges for future exascale systems. This includes facilitating significant improvements in energy efficiency through the efficient exploitation of accelerated hardware architectures based on graphics



processing units (GPUs) and utilising novel adaptive mixed-precision calculations.



The goal of the EXCELLERAT Centre of Excellence for Engineering Applications is to enable the European engineering industry to advance towards exascale technologies. The centre acts as a single point of access for expertise on how data management, data analytics, visualisation, simulation-driven design and co-design with HPC can benefit



engineering, especially in the aeronautics, automotive, energy and manufacturing sectors.



The EuroHPC Plasma Exascale-Performance Simulation CoE unites ten European partners in a collaborative effort to lead plasma science into the era of exascale computing. The centre aims to drive scientific breakthroughs in plasma science's most significant challenges (fusion energy, accelerator devices and space physics) through cutting-edge hardware and software advancements.

