

Hemodynamics data and modelling interaction for blood flow simulations: the common experience of the EA Cardio

Within the associated team Cardio, partners from INRIA (REO and MACS teams) and Stanford University (CVBRL, and colleagues), have combined their expertises to simulate blood flow in the large arteries and veins, where its dynamics is three-dimensional and complex. We will present how clinical hemodynamics data are integrated into patient-specific simulations and how these simulations can provide information complementary to clinical data. Direct and inverse problems will be illustrated with multi-scale (3D-0D coupling) and fluid-solid interaction simulations through common projects.

<https://idal-siege.inria.fr/cardio/>