Joint Brazil-Chile-Inria MS on Innovative Numerical Methods for Fluids

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In the context of Inria international initiatives in Chile (Inria Chile, unique Inria center abroad in Santiago since 2012, partner of many Chilean universities, incl. Universidad de Concepcion), and with Brazil (Inria-Brasil program based on a partnership with LNCC, acting as a Hub for Brazilian research and innovation ecosystem), this mini-symposium aims to bring together new trends in the development of innovative numerical methods (finite element and finite volume methods, multi-scale methods, domain decomposition, etc.) for fluid flow simulation adapted to high-performance computing and their interaction with machine learning techniques. The focus of this mini-symposium also includes the challenges and contributions to the mathematical analysis and computational implementation of these new methods, as well as their applications in the computational simulation of realistic fluid problems.