## **COMPUTATIONAL FLUID DYNAMICS AND FINITE ELEMENT METHODS: FORMULATIONS, IMPLEMENTATION STRATEGIES AND APPLICATIONS**

## LUCIA CATABRIGA\* AND SANDRA MALTA<sup>†</sup>

 Universidade Federal do Espírito Santo (UFES)
Vitória, Espírito Santo, Brazil luciac@inf.ufes.br

<sup>†</sup> Laboratório Nacional de Computação Científica (LNCC/MCTI) Petrópolis, Rio de Janeiro, Brazil smcm@lncc.br

**Key words:** Computational Fluid Dynamics (CFD), Finite Element Methodologies, Implementation Strategies

## ABSTRACT

The mini-symposium is dedicated to the discussion of recent developments and applications in the field of Computational Fluid Dynamics (CFD) based on innovative finite element methodologies (for example, discontinuous and hybrid methods) and/or implementation strategies. The areas of interested range from the mathematical and computational methods to the modeling and simulation of challenging applications. Contributions on methodological advances - such as efficient time integration, error estimation, numerical analysis and adaptive methods - are most welcome.