

# **PML - eine parallele Multilevel-Plattform für die Strömungssimulation**

J. Stiller

## **Abstract**

The simulation of unsteady, three-dimensional flows requires efficient numerical methods combining adaptivity and geometric flexibility with a scaleable parallel design. This paper presents a new software system which supplies the necessary infrastructure for the implementation of parallel, adaptive finite element methods. In particular this system provides procedures for the adaption and partitioning of unstructured grids. The underlying multilevel approach makes it well suited for the application of multigrid methods.