

INDUSTRY APPLICATION OF ADAPTIVE GRID REFINEMENT METHODS

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ABSTRACT

Adaptive meshing methods in academia currently have reached a high level of sophistication and maturity. However, there is only limited transfer of these advanced techniques to the industry. What are the reasons for this limited dissemination: is the industry hesitant to adopt radical changes? Are today's research codes insufficient in terms of industry standards for robustness and usability? Are researchers not sufficiently aware of the industry needs? Still, examples exist where adaptive methods have been adopted by the industry with success. In those cases, the industrial application serves as an acid test for the adaptive method, proving its worth in a real-world situation.

This minisymposium is meant to provide a return of experience on the transfer of adaptive mesh refinement techniques from academia to industry. Hands-on experience, both negative and positive, can be shared. Contributions are welcomed both from the academic and industry point of view, while authors are encouraged to address not only technical matters, but also for example questions of culture and communication.

It is hoped that this minisymposium can encourage and help researchers prepare their methods for industry application and let the industry profit more from today's research on adaptivity.