

# Some approaches on a posteriori error estimation in shape optimization

Hendrik Pasing<sup>1</sup>

After a brief introduction to shape optimization we will discuss approaches on a posteriori error estimation, including a posteriori error estimation of the compliance and shape gradient approximation. In addition to the aforementioned approaches we will present associated open or pending questions. In general we will assume models of elastic structures if necessary.

## References:

[1] Allarie, G. "Conception optimale de structures"

[2] [https://www.researchgate.net/publication/311769810\\_Quantitative\\_a\\_posteriori\\_error\\_estimators\\_in\\_Finite\\_Element-based\\_shape\\_optimization](https://www.researchgate.net/publication/311769810_Quantitative_a_posteriori_error_estimators_in_Finite_Element-based_shape_optimization)

[3] <http://www.esaim-cocv.org/articles/cocv/abs/2017/03/cocv160021-s/cocv160021-s.html>

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<sup>1</sup>Hochschule Ruhr West  
hendrik.pasing@hs-ruhrwest.de