QUANTITATIVE STABILITY FOR YAMABE MINIMIZERS ON MANIFOLDS WITH BOUNDARY

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Abstract: The study of quantitative stability for geometric inequalities has been extensively developed, particularly in relation to the isoperimetric inequality. In this talk, we aim to address the quantitative stability of a Yamabe-type functional on compact manifolds with boundary, introduced by Escobar, where the minimizers of the functional correspond to scalar-flat metrics with constant mean curvature on the boundary. We will discuss this stability result and highlight some open questions that appear particularly interesting in this context. This is a joint work with Hanne Van Den Bosch and Benjamin Borquez.

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