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## A few observations on the first eigenvalue of the Robin $p$-Laplace operator

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We obtain shape derivative formulae for the first eigenvalue of the Robin $p$-Laplace operator. This result is used to study the variation of the first eigenvalue with respect to perturbations of the domain. In particular, we prove that for large values of the boundary parameter, the first eigenvalue is monotonic with respect to domain inclusion for smooth domains. [AMS24].

[AMS24]  Ardra A, M. Mallick, and S. Sasi, *On a shape derivative formula for the Robin p-Laplace eigenvalue* (2024), arXiv: `2208.05183`.