

## **Multiple solutions for a higher order variational problem in conformal geometry**

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### **Resumo/Abstract:**

I will consider the total Q-curvature functional in the conformal class of a compact Riemannian manifold of dimension  $n$  greater than or equal to 5. This is the quadratic functional associated to the Paneitz operator, a fourth order differential operator given by the bi-Laplacian plus lower order terms. I will present two results of existence of multiple critical points of the total Q-curvature, that corresponds to metrics with constant Q-curvature in a fixed conformal class.