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## **Subcritical approximation of a Yamabe-type nonlocal equation: a Gamma-convergence approach**

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**Abstract.** We investigate a natural approximation by subcritical Sobolev embeddings of the Sobolev quotient for the fractional Sobolev spaces  $H^s$  for any  $0 < s < N/2$ , using  $\Gamma$ -convergence techniques. We show that, for such approximations, optimal functions always exist and exhibit a concentration effect of the  $H^s$  energy at one point.

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