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**RADIAL MINIMIZER OF A P-GINZBURG-LANDAU TYPE  
FUNCTIONAL WITH NORMAL IMPURITY INCLUSION**

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ABSTRACT. The author proves the  $W^{1,p}$  and  $C^{1,\alpha}$  convergence of the radial minimizers  $u_\varepsilon$  of an Ginzburg-Landau type functional as  $\varepsilon \rightarrow 0$ . The zeros of the radial minimizer are located and the convergent rate of the module of the minimizer is estimated.

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