

Nonradial solutions of nonlinear scalar field equations

Jarosław Mederski (IMPAN)

We prove new results concerning the nonlinear scalar field equation in \mathbb{R}^N with a nonlinearity satisfying the general assumptions due to Berestycki and Lions. In particular, we find at least one nonradial solution minimizing the energy functional on the Pohozaev constraint in dimension $N > 3$. The result gives a partial answer to a question posed by Berestycki and Lions.