

Meeting: 998, Houston, Texas, SS 4A, Special Session on Nonlinear Analysis

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Pablo Padilla* (pablo@mym.iimas.unam.mx), IIMAS, UNAM, Circuito Escolar, Cd. Universitaria Mexico City, Mexico, and **Henri Berestycki** and **Jerome Busca**. *Antisymmetry properties of changing-sign solutions of semilinear elliptic equations.*

We apply the moving-planes method to obtain antisymmetry properties of sign-changing solutions of semilinear elliptic equations on symmetric domains. The solutions are required to be monotone on the direction perpendicular to the symmetry plane and satisfy Neumann type boundary conditions. Suitable assumptions are also imposed on the nonlinearity. (Received March 01, 2004)