ON THE MOVING PLANE METHOD FOR SEMILINEAR AND QUASILINEAR ELLIPTIC PROBLEMS.

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ABSTRACT. Starting from the seminal paper of J. Serrin and driven by the celebrated result of B. Gidas, W. M. Ni and L. Nirenberg, the PDE community exploited the *Moving Plane Method* in various issues in order to prove symmetry and monotonicity properties of solutions to elliptic PDE. The method can be carried on in bounded or in unbounded domains. We will consider the leading examples given by the case of bounded domains, the case of the whole space and the case of the half space.