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Applications of Sub-supersolution theorems to singular nonlinear elliptic problems.

The motivation for the results presented here are several recent papers on singular boundary value problems for semilinear elliptic equations with convection terms. We present extensions which cover singular nonlinear equations (mainly equations involving the p -Laplacian) containing convection terms. The results obtained are proved using sub- and supersolution theorems (motivated by the sub- supersolution theorems of Le and the second author) and the construction of a well-ordered pair of such using a principal eigenfunction of the p -Laplacian. (Received December 16, 2010)