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Mihaela Manole* (michaela2050@yahoo.com), 708 W.Palmetto Street, Apt #B, Florence, SC 29501. *Systems of Nonlinear Schrödinger Equations.*

Using the existence results from Lions and Magenes we establish existence results for the nonlinear perturbed Schrödinger operator systems via Perov, Schauder and Leray-Schauder fixed point theorems. The abstract framework are related to Lebesgue-Sobolev spaces. The proofs are based on the fixed point methods and we apply convergent to zero matrices method used in Precup. (Received June 30, 2010)