

CONTINUOUS DEPENDENCE RESULTS FOR NON-LINEAR NEUMANN TYPE BOUNDARY VALUE PROBLEMS

Christine Georgelin

I will present estimates, obtained in a joint work with E. Jakobsen, on the continuous dependence on the coefficient for second order non-linear degenerate Neumann type boundary value problems on a regular bounded domain. A typical example is the Bellman-Isaacs equations with the controlled reflexion conditions. Our results extend previous work of Cockburn et.al., Jakobsen-Karlsen, and Gripenberg and include both continuous dependance on the equation and on the boundary .

I will discuss some applications like obtaining the rate of convergence for the vanishing viscosity method for such problems or the $C^{0,\alpha}$ regularity of the viscosity solutions of problems with large zero order coefficient... .