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A relaxation approach to vector-valued Allen-Cahn MPEC problems

M. Hassan Farshbaf-Shaker

WIAS Berlin

Hassan. Farshbaf-Shaker@wias-berlin.de

Abstract: In this talk, we consider a vector-valued Allen-Cahn MPEC problem. To derive optimality conditions we exploit a regularization-relaxation technique. The optimality system of the regularized-relaxed subproblems are investigated by applying the classical result of Zowe and Kurcyusz. Finally we show that the stationary points of the regularized-relaxed subproblems converge to weak stationary points of the limit problem.