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Prof. RNDr. Miroslav Englis, Director Institute of Mathematics Silesian University at Opava Na Rybnicku 1 74601 Opava, Czech Republic

Dear Professor Englis,

I have looked over the thesis *Quasilinear Hyperbolic Equation with Hysteresis* by Petra Kordulov, and I find it to be an excellent and well-written piece of work. The history and relevance of the problem are described very well and accurately, and previous works related to the directions of this project are also described well.

There are three achievments: a detailed account of the existence theory via nonlinear semigroups, the asymptotic behavior of solutions, and a regularity result for a special case. The first two follow in spirit the work of Jana Kopfova on related problems for parabolic equations, but this work for hyperbolic equations is sufficiently different to be of independent interest.

In summary, I can say that this thesis compares favorably with the better theses that I have seen in my experience, and that it would be considered a very good work at the best universities.

If you need the information for your reporting procedures, you may find my vita at http://www.math.oregonstate.edu/ show/vitaOSU.pdf

REShouldto

Ralph E. Showalter, Professor of Mathematics