

## A NONLINEAR INEQUALITY

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*Abstract.* A quadratic inequality is formulated in the paper. An estimate of the rate of decay of solutions to this inequality is obtained. This inequality is of interest in a study of dynamical systems and nonlinear evolution equations. It can be applied to the study of global existence of solutions to nonlinear PDE.

*Mathematics subject classification (2000):* 65J15, 65J20, 65N12, 65R30, 47J25, 47J35.

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### REFERENCES

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