ABSTRACT

The abstract should be in the form of a brief and concise statement of the main results or points of view of the paper, without demonstrations and with a minimum of formulae. It should not exceed 100 words and should be compressed if possible into a single paragraph. It should be written in the third person. The abstract should be typewritten and in a form suitable for immediate publication in the MONTHLY.

Linear models are not suitable for many physical phenomena, since there are qualitative features of such phenomena which can not occur in the solutions of linear differential equations. Several typically nonlinear phenomena, including limit cycles, jump phenomenon, entrainement, and nonsymmetrical solutions, were discussed. Assimple model of bowing a violin, which has a stable limit cycle, was studied in detail.

MATHEMATICAL ASSOCIATION OF AMERICA, INC. ABSTRACT OF PAPER

Address: Minneapolis, Minnesota	Institution: University of Minnesota	Name of Author: W. S. Loud	Time60minutes.	linear Phenomena	Title of Paper: The Mathematics of Bowing a Violin and other Non-	

Member of Mathematical Association of America: Yes ₺ No □