

World Scientific 192 pp, 1991

COUNTER EXAMPLES IN DIFFERENTIAL EQUATIONS AND RELATED TOPICS

A Collection of Counter Examples

by **John M Rassias** (*Univ. Athens*)

This collection of counter-examples highlights the theory of differential equations and related topics which is now playing an enormously important role in the area of science, engineering and mathematics.

Contents:

- Continuity and Linearity
- Differentiability and Analyticity
- Extrema
- Existence
- Uniqueness
- Stability
- Singularities
- Dynamical Systems
- Integral Equations
- Other Topics
- Open Problems

Readership: Undergraduate, graduate students and researchers in mathematical physics.

"The author knows his business: he has chosen the right counterexamples at the right time. The section on plane autonomous systems is particularly felicitous, and should be consulted by whoever teaches elementary differential equations (some of the examples are really cute and we will use them in our 400-student course next year). Why can't mathematicians write more books like this one?"

*G C Rota
MIT*