

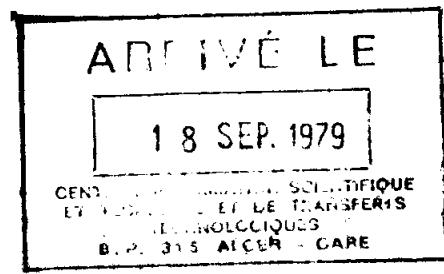
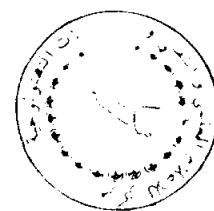
# Séminaires IRIA

**analyse  
et contrôle  
de systèmes**

**1972**

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# Séminaires IRIA



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## **INTRODUCTION**

Ce volume regroupe l'essentiel des Séminaires d'Analyse Numérique et d'Automatique qui ont eu lieu à l'IRIA (Laboria) en 1972. Les articles reproduits sont les documents fournis par les conférenciers à l'issue de leurs séminaires.

On posséde donc ici une photo instantanée (ou presque . . . ) des préoccupations scientifiques d'une dizaine de professeurs étrangers de renom. Un tel ouvrage sera, grâce à sa publication rapide, un outil de travail utile à tous les chercheurs de Mathématiques Appliquées.

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## EXISTENCE OF PERIODIC SOLUTIONS : A GENERAL APPROACH

H.A. Antosiewicz  
University of Southern California

### Abstract

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In recent years considerable interest has centered around the problem of establishing "testable" sufficient conditions for the existence of a periodic solution of an ordinary differential equation of the form

$$\dot{x} = f(t, x).$$

This is a classical problem, of course, and a great wealth of results may be found in the literature.

My aim in this lecture is to outline briefly a few of the principal methods of attack that have been developed and to indicate some recent results that can be obtained by the use of them. Throughout, I will stress basic ideas rather than utmost generality.

All details omitted here are given in the references listed at the end.

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