

*Subharmonic and Ultraharmonic Solutions
for Weakly Non-linear Systems*

ROBERT A. GAMBILL & JACK K. HALE

Communicated by IRMGARD FLÜGGE-LOTZ

CONTENTS

Introduction	354
§1. Description of the method and proof of convergence	356
§2. Existence of periodic solutions	360
§3. Variations of the method	362
§4. Further considerations for real systems	365
§5. Cases when the Jacobian is identically zero	369
§6. The Duffing and Mathieu equations	376
§7. Liénard type equation with a forcing term	383
§8. The Reuter equation	387
§9. Applications to systems	389
§10. Remarks on autonomous systems	392
Bibliography	393