

**JOURNAL OF PLASMA PHYSICS**

Volume 45 Part 2 April 1991

**CONTENTS**

- Theoretical study of a plasma column sustained by an electromagnetic surface wave in the dipolar mode  
K. BENOVA, I. GHANASHEV AND I. ZHELYAZKOV 137
- Generation and radiation of third harmonics by an electrostatic wave in a narrow inhomogeneous layer of a warm plasma  
A. M. HUSSEIN 153
- Reconstruction of global micropulsations in the magnetosphere  
M. H. WANG, S. T. KUO AND M. C. LEE 159
- Propagation of electromagnetic waves in a density-modulated plasma  
MAURIZIO LONTANO AND NICOLA LUNIK 173
- Stability analysis of sheared non-neutral relativistic cylindrical electron beams in applied magnetic fields  
D. ZOLER AND S. CUPELMAN 191
- Variational approach to Langmuir waves described by the Zakharov equations  
J. C. BHARTI 203
- Kinetic theory of Alfvén waves in plasmas with force-free currents  
I. J. DONNELLY AND B. E. CLANCY 213
- Excitation of thermonuclear cone instabilities by toroidal equilibrium distributions of high-energy alpha particles in tokamaks  
M. LISAK, H. HAMNEN AND D. ANDERSON 229
- Aspects of subgrid modelling and large-eddy simulation of magnetohydrodynamic turbulence  
YE ZHOU AND GEORGE VAHALA 239
- Computer modelling of three-dimensional dynamics of fast reconnection  
M. UGAI 251
- Tearing-mode stability in a cylindrical plasma with equilibrium flows  
K. P. WESSEN AND M. FERSSON 267
- Nonlinear acoustic waves in partially ionized collisional plasmas  
N. N. RAO, D. J. KAUP AND P. K. SHUKLA 285

© Cambridge University Press 1991

**CAMBRIDGE UNIVERSITY PRESS**

THE PITT BUILDING, TRUMPINGTON STREET, CAMBRIDGE CB2 1RP

40 WEST 20TH STREET, NEW YORK, NY 10011-4211, USA

10 STAMFORD ROAD, OAKLEIGH, MELBOURNE 3166, AUSTRALIA

*Printed in Great Britain by the University Press, Cambridge*