

## CONTENTS

1.	SUMMARY OF THE WORKSHOP — N. A. Uckan, D. E. Baldwin, H. L. Berk, C. L. Hedrick, H. Grad, N. A. Krall, and D. A. Spong .....	1
2.	OVERVIEW .....	12
	RUDIMENTARY THEORIES OF THE STABILITY OF MICROWAVE HEATED PLASMAS — G. E. Guest .....	15
	REVIEW OF RECENT EBT COUPLED RING-CORE STABILITY THEORY — D. A. Spong .....	33
	BRIEF SURVEY OF EXPERIMENTAL INVESTIGATION OF INSTABILITIES IN MICROWAVE HEATED PLASMAS — N. A. Uckan and G. R. Haste .....	63
3.	EXPERIMENTAL OBSERVATIONS .....	73
	FLUCTUATION MEASUREMENTS IN EBT — L. Bighel, G. R. Haste, and A. Komori .....	75
	HOT-ELECTRON RING STABILITY AT THE UNIVERSITY OF TENNESSEE — I. Alexeff and M. Saylor .....	83
4.	RING-CORE COUPLING, LOW FREQUENCY MODES .....	95
	EIGENMODE STABILITY ANALYSIS FOR A BUMPY TORUS — J. W. Van Dam, H. L. Berk, M. N. Rosenbluth, and D. A. Spong .....	97
	NUMERICAL SOLUTIONS OF THE EBT RADIAL EIGENMODE PROBLEM — D. A. Spong, J. W. Van Dam, H. L. Berk, and M. N. Rosenbluth .....	115
	STABILITY OF HOT ELECTRON PLASMA IN THE ELMO BUMPY TORUS — K. T. Tsang and C. Z. Cheng .....	141
	ANALYTICAL THEORY OF INTERCHANGE AND COMPRESIONAL ALFVEN INSTABILITIES IN EBT — C. Z. Cheng and K. T. Tsang ...	161
5.	HIGH FREQUENCY MODES .....	179
	MICROINSTABILITY OF THE EBT BOUNDARY — N. T. Gladd, N. A. Krall, S. Hamasaki, and J. L. Sperling .....	181
	ELECTRON CYCLOTRON RESONANT HEATED ELECTRON DISTRIBUTION FUNCTIONS — Y. Matsuda, W. M. Nevins, and R. H. Cohen .....	211
6.	EQUILIBRIA AND CALCULATIONAL FORMALISM OF STABILITY .....	227
	NUMERICAL ANALYSIS OF EQUILIBRIUM AND STABILITY IN BUMPY CYLINDER — H. Sanuki, T. Onigo, S. Ishiguro, and T. Kamimura .....	229
	KINETIC STABILITY ANALYSES IN A BUMPY CYLINDER — R. R. Dominguez and H. L. Berk .....	249
	BALLOONING STABILITY IN TOROIDAL DEVICES — Shoichi Yoshikawa .....	265

7. REACTOR IMPLICATIONS .....	279
EFFECT OF BETA LIMITS ON REACTOR PERFORMANCE	
IN EBT — N. A. Uckan, D. A. Spong, and D. B. Nelson .....	281
AUTHOR INDEX .....	297
ATTENDANCE LIST .....	299
AGENDA .....	305