

C O N T E N T S

<u>INVITED PAPERS</u>	1
R.J. BICKERTON - Review of the physics of neutral beam injection in Tokamaks.	3
R.A. DORY et al. - Tokamaks heated to high beta.	19
J.F. BONNAL - Progress in technology of neutral beam injection in Tokamaks.	57
E.B. HOOPER, Jr - Neutral beam production using negative ions.	71
E.B. HOOPER, Jr - Field reversal experiment in 2XIIB.	85
H. HSUAN et al. - Energy balance of the PLT Tokamak.	87
F. DE MARCO et al. - Preliminary results of ohmic heating in FT.	97
B. COPPI & A. TARONI - Alpha - particle heating in high density plasmas.	113
V.E. GOLANT - High frequency heating in toroidal plasmas.	149
S. TANAKA - Additional heating experiments in Japan.	163
E. CANOBBIO - Thermonuclear prospects of very low frequency heating methods.	175
F. PARLANGE et al. - T T M P studies in the Pétula Tokamak.	183
F. TROYON et al. - Alfven wave heating in toroidal plasmas.	195
T F R GROUP - I C R F heating in T F R. Preliminary observations and prospects for further developments.	207

J.C. HOSEA et al. -	I C R F heating in P L T.	217
A.M. MESSIAEN et al. -	Coupling of R F energy in toroidal devices by means of magneto-acoustic resonances.	229
G.J. MORALES & R.J. TAYLOR -	I C R F heating studies in the Macrotor Tokamak.	241
M. BRAMBILLA -	The theory of lower hybrid heating of tokamak plasmas.	251
P.P. LALLIA et al. -	On the effectiveness of lower hybrid resonance heating in the Wega Tokamak.	265
T. NAGASHIMA & N. FUJISAWA -	Lower hybrid heating experiments in J F T - 2 Tokamak.	281
W.M. HOOKE -	The U S lower hybrid experimental program.	293
V.V. ALIKAEV -	Electron cyclotron heating in Tokamaks : experiments and prospects.	307
H. IKEGAMI & R.A.DANDL -	Electron cyclotron heating in Bumpy Torus program.	321
V.A. FLYAGIN et al. -	Gyrotrons for the electron cyclotron plasma heating in large Tokamaks.	339
H.R. JORY -	Development of gyrotron power sources in the millimeter wavelength range.	351
T.H. STIX -	The role of stochasticity in radiofrequency plasma heating.	363
J.L. SHOHET -	Heating of current - free Stellarators.	377
R. CANO -	A review of specific diagnostics for additional heating in Tokamak.	389

<u>ADDENDA</u>	399
P. JAVEL - On the use of duality and complex vectorial space for the orthonormal decomposition of the electromagnetic field in anisotropic media.	401
J.A. ROME & Y.-K.M. PENG - The topology of Tokamak orbits.	407
P.J. LOMAS et al. - Neutral injection heating of CLEO Stellarator. Theory and experiment.	409
Y. YASAKA & R. ITATANI - Ion cyclotron heating by azimuthally rotating R F fields.	411
N.J. FISCH - Steady-state Tokamak reactors with R F driven currents.	413
F. SANTINI & M. TONON - Ray trajectory and ion absorption of L H waves in Tokamak.	415
M. J. SMITH & J.P. RANDALL - Considerations in the design of a 50 GHz gyrotron.	417
<u>POST DEAD-LINE CONTRIBUTED PAPERS</u>	419
V.A. SUPRUNENKO - Ohmic heating of a plasma in closed magnetic systems.	421
V.V. PARAIL et al. - The diffusion of runaway electrons in Tokamak and power balance in moderate densities discharges.	429
W. HORTON et al. - R F instabilities driven by neutral beam injection.	435
DIVA GROUP - Preliminary results of I C R F heating in D I V A.	441
V.V. ALIKAEV et al. - I C R heating in Tokamak T-10 under the conditions of weak dissipation.	447
P. BRIAND et al. - Parametric heating near the lower hybrid frequency in Pétula (I).	455

C.M. SINGH et al. - Parametric heating near the lower hybrid frequency in Pétula (II).	457
P.P. LALLIA - Grill phase tracking during a density increase in Tokamaks.	459
S. PURI - Transmission line approximation for the R F coupling loops.	461
S. PURI - Linear amplification and absorption of the lower hybrid wave.	467
V.V. PARAIL & R.V. SHYRUGIN - The influence of the quasilinear effects on plasma heating by the lower hybrid waves.	475
C.J. EDGCOMBE - Video demonstration : relativistic electrons orbiting in a static magnetic field and alternating transverse electric fields.	481
<u>AUTHOR INDEX</u>	483