

C O N T E N T S

SESSION E - COLLISIONS

	Pages
E.1 - the Theory of Velocity Distributions Associated with Bounded Quiescent Plasmas : A Problem in Spatial Relaxation H. DREICER, J.D. THOMAS and W.B. RIESENFIELD Los Alamos Scientific Laboratory, University of California, LOS ALAMOS, N.M., USA	1-10
E.2 - Resonant Charge Exchange in Alkali Q-Machines : The Cross-Section Measurement and its Importance H. DREICER and D.B. HENDERSON Los Alamos Scientific Laboratory, University of California, LOS ALAMOS, N.M., USA	11-16
E.3 - Measurement of Ion Neutral Collision Frequencies by Means of the Ion-Acoustic Wave Dispersion and Damping H.J. DOUCET, D. GRESILLON, J. VIRMONT and A. WEIL Laboratoire de Physique des Milieux Ionisés, Ecole Polytechnique, PARIS, France	17-26
E.4 - Evolution of the Microscopic Characteristics of a Cesium Vapor during an Afterglow J.C. JEANNET, S. RONSSIN and B. SAYER Service de Physique Théorique, Centre d'Etudes Nucléaires de Saclay, GIF SUR YVETTE, France	27-34

SESSION F - PRODUCTION TECHNIQUES OF QUIESCENT PLASMAS

F.1 - Non Resonant Radiofrequency Source of High Density Quiescent Plasma G. LISITANO Institut fur Plasmaphysik GmbH, 8046 GARCHING, Fed. Rep. of Germany M. FONTANESI and E. SINDONI Istituto di Scienze Fisiche, Università di Milano, MILANO, Italie	35-38
F.2 - A Second Generation Quiescent plasma Source : the ECH Q-Machine D. MICHAEL, J. MC LEOD and H. DREICER Los Alamos Scientific Laboratory, University of California, LOS ALAMOS, N.M., USA	39-48
F.3 - Quiescent Photoionized Plasma J.S. DE GROOT, D. COHN, J. ROBIN and K.R. MAC KENZIE Department of Physics, University of California, LOS ANGELES, Cal., USA	49-56
F.4 - A Quiescent Neutralized Beam Plasma with Variable T_i/T_e R.J. TAYLOR, H. IKEZI and K.R. MAC KENZIE Department of Physics, University of California, LOS ANGELES, Cal., USA	57-66

- F.5 - Production and Study of an Alkali Plasma with Negative Ions
 M. HASHMI, A.J. VAN DER HOUVEN VAN OORDT and J.G. WEGROWE
 Institut fur Plasmaphysik GmbH, 8046 GARCHING,
 Fed. Rep. of Germany 67-72
- F.6 - A New Operating Hot Plate with Programmable Temperature Profiles
 F.E. WITTMAN, D.B. HENDERSON and H. DREICER
 Los Alamos Scientific Laboratory, University of California, LOS ALAMOS, N.M., USA 73-78
- F.7 - Sealed off, Space Charge Limited Bombardment Diode for Q-Machine
 R.H. ABRAMS Jr and H. LASHINSKY
 University of Maryland, College Park, MARYLAND, USA
 R.C. MAC RAE
 Eimac, Division of Varian, SAN CARLOS, Cal., USA 79-86
- F.8 - Heat Pipe Design for Homogeneous Heating of Cathodes in Plasma Devices
 A.M. SHROFF and F. IMBERT
 THOMSON-CSF, Centre de Corbeville, CORBEVILLE, France 87-94
- F.9 - Vacuum Furnaces for Isothermal Plasma
 C. ROSATELLI
 Centro di Calculo, Via Mazzini 16, BOLOGNE, Italie 95-102
- F.10 - The Angular Distribution of Efflux from an Atomic Beam Nozzle
 D.B. HENDERSON
 Los Alamos Scientific Laboratory, University of California, LOS ALAMOS, N.M., USA 103-110

SESSION G - DIAGNOSTIC

- G.1 - Standing Radial Waves as Diagnostic Tools
 R.L. MOORE
 Douglas Aircraft Company, Mc Donnell Douglas Corporation, LONG BEACH, Cal., USA 111-118
- G.2 - Optical Measurement of Low Plasma Densities
 R.O. MOTZ
 Department of Physics, Stevens Institute of Technology, HOBOKEN, N.J. 07030, USA 119-127
- G.3 - Use of Tuned Laser Radiation to both Diagnose and Enhance the Local Conditions within an Alkali-Plasma
 R.M. MEASURES
 Institute for Aerospace Studies, University of Toronto, TORONTO, Canada 128-134

	Pages
G.5 - Effect of Plasma Access Holes in Microwave Resonators used for Determination of Electron Density H. DREICER and W.F. RICH Los Alamos Scientific Laboratory, University of California, LOS ALAMOS, N.M., USA	135-140
G.6 - Density Measurement by Microwave in a Q-Machine P. MILLS and J. SCHMITT Laboratoire de Physique des Milieux Ionisés, Ecole Polytechnique PARIS, France	141-148
G.7 - Ionic and Electronic Temperatures Measurements in Q-Machines J.M. BUZZI and H.J. DOUCET Laboratoire de Physique des Milieux Ionisés, Ecole Polytechnique, PARIS, France	149-156
G.8 - Increased Sensitivity, Holographic Techniques for Plasma Diagnostics O.M. FRIEDRICH, F. WEIGL and A.A. DOUGAL Department of Electrical Engineering, and Electronics Reserach Center, The University of Texas, AUSTIN, Texas 78 712, USA	157-164
AUTHORS INDEX	165