

VI
LIST OF TITLES

P A R T I

Topic 1: Tokamaks

Poster-No. Title, Author(s)	Volume/Page
1-1 High current, high power H-modes in JET, <i>Jones T.T.C., Balet B., Brusati M., Bures M., Hugon M., Lawson K.D., Lomas P.J., Morgan P.D., Morsi H., Nielsen P., Sadler G., Sartori R., Start D.F.H., Summers D.D.R., Tanga A., Taroni A., Thomsen K., Ward D.J.</i>	I-3
1-2 Influence of divertor geometry and boronization on the ELM-free H-mode confinement in ASDEX, <i>Ryter F., Kardaun O.J.W.F., Kus A., Vollmer O., Stroth U., Wagner F., ASDEX-, NI-Teams</i>	I-7
1-3 VH-mode discharges in the DIII-D tokamak, <i>Greenfield C.M., Jackson G.L., Burrell K.H., DeBoo J.C., Lao L.L., Osborne T.H., Rettig C., Schissel D.P., Taylor T.S., Winter J.</i>	I-11
1-4 Current scaling of plasma confinement, <i>Christiansen J.P., Challis C., Cordey J.G., Gormezzano C., Gowers C., Kramer G.J., O'Rourke J., Taroni A., Tibone F., Tubbing B., Stubberfield P.M.</i>	I-15
1-5 Dependence of confinement on plasma ion species in JET, <i>Tibone F., Balet B., Bures M., Cordey J.G., Jones T.C.C., Lomas P.J., Lawson K., Morsi H.W., Nielsen P., Start D.F., Tanga A., Taroni A., Thomsen K., Ward D.J.</i>	I-19
1-6 Energy confinement of FTU ohmic plasma, <i>Alladio F., Berton F., Bracco G., Buratti P., Tudisco O., FTU Team, Bruschi A., De Luca F., Jacchia A., Mantica P.</i>	I-23
1-7 Global energy confinement in TORE SUPRA, <i>Hoang G.T., Bizarro J.P., De Gentile B., Hutter Th., Laurent L., Litaudon X., Moreau D., Peysson Y., Tonon G., Van Houtte D.</i>	I-27
1-8 Energy confinement in the tight aspect ratio tokamak, START, <i>Appel L.C., Duck R., Fielding S.J., Gibson K.J., Hugill J., Li J., Manhood S.J., Morris A.W., Robinson D.C., Sykes A., Turner M.F., Valovic M., Walsh M.J.</i>	I-31
1-9 Confinement scaling for the ASDEX L-mode in different divertor configurations, <i>Stroth U., Kardaun O.J.W.F., Kus A., the ASDEX-, the NI-Teams</i>	I-35
1-11 Recycling perturbations of supershot plasmas, <i>Scott S.D., McCune D.C., Bell M.G., Bell R., Budny R.V., Fredrickson E., Grek B., Hill K.W., Jassby D., Jobs F., Johnson D.W., Johnson L.C., Mansfield D.K., Park H.K., Ramsey A.T., Snipes J.A., Stratton B.E., Synakowski E.J., Taylor G., Towner H.H., Zarnstorff M.C.</i>	I-39
1-12 Simulations of beam-fueled supershot-like plasmas near ignition, <i>Budny R.V., Grisham L., Jassby D.L., Manickam J., McCune D., McGuire K.M., Sabbagh S.A., Scott S.D., Stotler D., Wieland R., Zarnstorff M.C., Zweben S.J.</i>	I-43

VII

Poster-No. Title, Author(s)	Volume/Page
1-13 The investigation of properties of ohmic, ion-cyclotron plasma heating in the condition of boronized tokamak first wall, <i>Azizov E.A., Buzhinskij O.I., Chernobaj A.P., Dmitriev V.I., Jakovenko V.P., Kanaev A.I., Kovan I.A., Krasilnikov A.V., Mirnov S.V., Monakhov I.A., Petrov A.A., Petrov V.G., Portnov D.V., Romannikov A.N., Semenov I.B., Sharapov V.M., Sotnikov S.M., Tugarinov S.N., Sharapov V.M., Zakharov A.P.</i>	I-47
1-15 Confinement scaling for kinetic energy in tokamak L-mode plasmas, <i>Takizuka T.</i>	I-51
1-16 The effect of current profile changes on confinement in the DIII-D tokamak, <i>Ferron J.R., Lao L.L., Taylor T.S.</i>	I-55
1-17 Heat transport with strong on/off axis heating, <i>Balet B., Boucher D., Cordey J.G., Muir D., Neudatchin S.V., Schmidt G.</i>	I-59
1-18 Energy confinement in high performance JET D-T plasmas, <i>Stubberfield P.M., Balet B., Cordey J.G., O'Brien D.P., Thomsen K., Von Hellermann M.</i>	I-63
1-19 Determination of the ion thermal diffusivity from neutron emission profiles in decay, <i>Sasao M., Adams J.M., Conroy S., Jarvis O.N., Marcus F.B., Sadler G., Van Belle P.</i>	I-67
1-21 Local power balance analysis in ohmic, ECR heated plasmas in RTP, <i>Konings J.A., Hogewij G.M.D., Lopes Cardozo N.J., Oomens A.A.M., Schüller F.C., RTP Team</i>	I-71
1-22 Perturbative transport analysis in RTP, <i>Hogewij G.M.D., Lopes Cardozo N.J., Peters M., RTP Team, De Luca F., Gorini G., Jacchia A., Mantica P.</i>	I-75
1-23 Experiments on heat pulse propagation generated by localized electron cyclotron heating on the WT-3 tokamak, <i>Tanaka S., Hanada K., Minami T., Maehara T., Makino K., Kisigami Y., Kishino T., Nakamura M., Maekawa T., Terumichi Y.</i>	I-79
1-24 Characteristics of heat pulse propagation at JT-60U, <i>De Haas J.C.M., Nagashima K., Shirai H.</i>	I-83
1-25 Gas puff modulation experiment on JT-60U, <i>Nagashima K., Sakasai A., De Haas J.C.M., Fukuda T.</i>	I-87
1-27 Modeling simultaneous sawtooth measurements of the thermal and energetic electron diffusivities from the TEXT tokamak, <i>Catto Peter J., Myra J.R., Bengtson Roger D., Wootton A.J.</i>	I-91
1-28 Asymmetry of radial heat pulse propagation at TEXTOR, <i>Krämer-Flecken A., Tokar M.Z., Waidmann G., Wolf G.H.</i>	I-95
1-29 Transport studies in TJ-1 tokamak from steady and perturbative methods, <i>Pardo C., Rodriguez-Yunta A., Vega J., Branas B., Estrada T., Ochando M.A., Tabares F.L., Zurro B.</i>	I-99
1-30 Magnetic turbulence measurement from pellet striations: first comparison with energy transport, <i>Dubois M.A., Pégourié B., Sabot R., Hoang G.T.</i>	I-103

VIII

Poster-No. Title, Author(s)	Volume/Page
1-31 Transport and turbulence in TORE SUPRA ohmic discharges, <i>Garbet X., Payan J., Laviron C., Devynck P., Saha S.K., Capes H., Chen X.P., Coulon J.P., Gil C., Harris G., Hutter T., Pecquet A.L., Truc A., Hennequin P., Gervais F., Quéméneur A.</i>	I-107
1-32 Study of the plasma turbulence by means of reflectometry methods in the TUMAN-3, FT-2 tokamaks, <i>Aleksandrov V.O., Bulanin V.V., Korneev D.O., Sergeev A.A.</i>	I-111
1-33 Particle flux in a tokamak: fundamental experimental constraints on the form and relation to fluctuations, <i>Gentle K.W., Richards B., Austin M.E., Bravanec R.V., Brower D.L., Gandy R., Li W.L., Phillips P.E., Ross D.W., Rowan W.L., Schoch P.M., Sing D.C., Valanju P.M., Wootton A.J.</i>	I-115
1-34 Diffusion of fast electrons after a monster sawtooth crash, <i>Hugon M., Bartlett D., Brusati M., Froissard P., Gormezano C., Morgan P., Porte L., Rimini F., Stamp M.</i>	I-119
1-35 Electron temperature and density gradients across magnetic m=2 structures in RTP, <i>Van Milligen B.Ph., Van Lammeren A.C.A.P., Lopes-Cardozo N.J., Schüller F.C., Verreck M.</i>	I-123
1-37 Profile consistency on FTU, <i>Buratti P., Zerbini M., Bracco G., Segre S.E., Zanza V.</i>	I-127
1-38 Theory-based transport simulation of tokamaks: density scaling, <i>Ghanem E.-S., Kinsey J., Singer C.</i>	I-131
1-40 Role of Alfvén-Wave filaments in tokamak transport, <i>Morales G.J., Ramachandran H.</i>	I-135
1-41 Energy and current transport: symmetry breaking and degradation, <i>Coppi B., Pegoraro F.</i>	I-139
1-42 On relaxation of tokamak discharges with toroidal plasma rotation, <i>Throumoulopoulos G.N., Pantis G.</i>	I-143
1-45 Perturbative measurement of suprathermal electron diffusion in JET, <i>Gonhalekar A., Bartlett D., Lomas P., Martin-Solis R., O'Brien M.</i>	I-147
1-46 Measurements of MeV energy ICRF driven minority ions in JET, <i>Khudoleev A.V., Afanasyev V.I., Corti S., Gondhalekar A., Maas A.C., Petrov M.P.</i>	I-151
1-47 Observation of relativistic runaway electrons by synchrotron radiation in TEXTOR, <i>Jaspers R., Finken K.H., Mank G., Rusbüldt D., Lopes-Cardozo N.J., Schüller F.C., Boedo J., Hoenen F.</i>	I-155
1-48 Combined repetitive pellet injection and lower hybrid current drive experiments in TORE SUPRA, <i>Géraud A., Foster C.A., Pégourié B., Peysson Y., Bibet P., Chatelier M., Drawin H.W., Moreau D.</i>	I-159
1-49 Observations of suprathermal electrons in the edge region on JET H-mode plasmas, <i>Bartlett D.V., Porte L., Costley A.E., Jones S.E., Smith R., Zolfaghari A.</i>	I-163

Poster-No. Title, Author(s)	Volume/Page
1-50 Effects of enhanced toroidal field ripple on JET plasmas, <i>Sadler G., Barabaschi P., Bertolini E., Conroy S., Deksnis E., Dietz J., De Esch B., Green B., Huguet M., Huart M., Jacquinet J., Jarvis O.N., Khudoleev A., Loughlin M.J., König R., Last J., Maas A., Petrov M., Putvinskii S., Sborchia C., Stork D., Tubbing B., Van Belle P.</i>	I-167
1-51 Two-dimensional measurement of heat load on the first wall due to fast ion ripple loss in JT-60U with near-perpendicular NBI, <i>Tobita K., Tani K., Neyatani Y., Takeuchi H., Miura S., Nishitani T., Matsuoka M.</i>	I-171
1-52 Profile measurements of localized fast electrons and ions in TORE SUPRA, <i>Basiuk V., Roubin J.-P., Becoulet A., Carrasco J., Martin G., Moreau D., Saoutic B.</i>	I-175
1-53 Investigation of microturbulence drive and damping mechanism in DIII-D, <i>Rettig C.L., Peebles W.A., Burrell K.H., Doyle E.J., Groebner R.J., La Haye R.J., Luhmann Jr. N.C., Philipona R., Rhodes T.L.</i>	I-179
1-54 Edge ion dynamics in H-mode discharges in DIII-D, <i>Groebner R.J., Burrell K.H., Gohil P., Kim J., Seraydarian R.P.</i>	I-183
1-55 Investigation of the effect of large core changes in toroidal plasma rotation and radial electric field on confinement in H-mode discharges in the DIII-D tokamak, <i>La Haye R.J., Groebner R.J., Hyatt A.W., Scoville J.T.</i>	I-187
1-56 Characteristic features of density fluctuations associated with the L-H-transition in the ASDEX tokamak, <i>Dodel G., Holzhauser E. and the ASDEX-Team</i>	I-191
1-57 H-mode power threshold in ASDEX, <i>Ryter F., Stroth U., Wagner F., ASDEX-Group, NI-Group</i>	I-195
1-58 Measurement of the toroidal motion of fine-scale density structures in JET plasmas, <i>Costley A.E., Cripwell P., Fukuda T.</i>	I-199
1-60 Plasma flows and fluctuations during H-modes in TFTR, <i>Bush C.E., Stratton B.C., Synakowski E., Bretz N., Budny R., Darrow D.S., Durst R., Fonck R., Fredrickson E.D., Mazzucato E., McGuire K.M., Medley S.S., Nazikian R., Paul S., Ramsey A.T., Schivell J., Scott S.D., Taylor G., Wieland R.M., Zweben S.</i>	I-203
1-61 Autooscillating L-H transitions under ECCD in T-10, <i>Voitsekhovich I.A., Kislov D.A., Parail V.V., Razumova K.A.</i>	I-207
1-62 Rotation in ohmically heated tokamaks: a detailed comparison of experiment with theory, <i>Rowan W., Calvin M., Hazeltine R., Meigs A., Solano E., Valanju P.</i>	I-211
1-63 Divertor plate biasing and current injection on TdeV, <i>Lachambre J.-L., Couture P., Boileau A., Boucher C., Decoste R., Gregory B., Janicki C., Lafrance D., Le Clair G., Liu-Hinz C., MacLatchy C., Martin F., Michaud D., Ross G.G., Stansfield B., St-Onge M., Terreault B., Wang Z.</i>	I-215
1-64 Edge fluctuations at regimes with improved confinement on CASTOR tokamak, <i>Stöckel J., Kryska L., Zacek F., Badalec J., Jakubka K., Mlynar J., Magula P., Kletecka P.</i>	I-219

Poster-No. Title, Author(s)	Volume/Page
1-66 H mode induced by the biased electrode and transition of low density to high density with optimized gas puffing in HL-1, <i>Ran L.B., Yang H.R., Yang S.K., Zhang S.X., Zheng Y.Z., Wang E.Y., Wang Z.H., Yao L.H., Sun S.Q., Qin Y.W., Dong J.F., Deng Z.C., Deng H.C., Guo G.C., Jiang Y.X., Li H.Z., Li K.H., Zuo H.N., Yang J.W., Yang Q.W., Huang K.Q., Yuan C.J., HL-1 Team</i>	I-223
1-67 ELM precursors in JET, <i>Ali-Arshad S., Campbell D., Colton A., Cripwell P., De Kock L., Kramer G.J., Nave M.F.F., Neill G.F.</i>	I-227
1-68 Reflectometry measurements of the m=1 satellite mode in L-, H-mode plasmas in ASDEX, <i>Serra F., Manso M.E., Silva A., Matias J., Wagner F., Zohm H., Kallenbach A., Varela P.</i>	I-231
1-69 A quantitative analysis of the effect of ELMS on H-mode thermal energy confinement in DIII-D, <i>Schissel D.P., Osborne T.H., Carlstrom T.N., Zohm H.</i>	I-235
1-70 Steady state H-modes in JET, <i>Thomas P.R., Campbell D.J., Gondhalekar A., Lowry C.J.</i>	I-239
1-71 ELM studies on DIII-D and a comparison to ASDEX results, <i>Zohm H., Osborne T.O., Burrell K.H., Chu M.S., Doyle E.J., Gohil P., Hull D.N., Lao L.L., Taylor T.S., Turnbull A.D.</i>	I-243
1-72 MHD stability models of edge localized modes in JET discharges, <i>Huysmans G.T.A., De Blank H.J., Kerner W., Goedbloed J.P., Nave M.F.F.</i>	I-247
1-73 Neutron profile measurements during the tritium experiments in JET, <i>Marcus F.B., Adams J.M., Bond D.S., Conroy S., Howarth P.J.A., Jarvis O.N., Loughlin M.J., Sadler G., Smeulders P., Van Belle P., Watkins N.</i>	I-251
1-74 Fuelling of JET limiter, x-point plasma by deuterium pellet injection, <i>Schmidt G.L., Bartlett D., Baylor L., Bures M., Edwards A., Gadeberg M., Gottardi N., Jones T., Kupschus P., Lomas P., Morgan P., Morsi H., Nielsen P., O'Rourke J., Sadler G., Start D.F.H., Stubberfield P., Tanga A., Ward D.</i>	I-255
1-75 Measurements of the electron source distribution and implications for particle transport, <i>O'Rourke J., Kramer G.J., Simonini R., Sips A.C.C.</i>	I-259
1-76 Particle transport during the tritium experiments in JET, <i>Balet B., Cordey J.G., Jones T.T.C., Konig R., Marcus F., Sadler G., Stubberfield P.M., Von Hellermann M.</i>	I-263
1-79 First results of pellet injection in ECR and ohmic heated discharges in RTP, <i>Oomens A.A.M., da Cruz Jr. D.F., Van Dijk G., Van Gelder J.F.M., Lok J., Rommers J.H., Tielemans A.J.H., RTP-Team</i>	I-267
1-80 On the bootstrap current calculations based on values of the radial electron transport, <i>Petrzilkova V.</i>	I-271
1-81 Helium transport studies on DIII-D, <i>Finkenthal D., Hullis D.L., Wade M.R., West W.P., Hogan J.T., Burrell K.H., Seraydarian R., Groebner R.J., Gohil P., Klepper C.C., Mioduszewski P.K.</i>	I-275

Poster-No. Title, Author(s)	Volume/Page
1-83 Poloidal asymmetry of impurity in co-, counter-injection experiment at JET, <i>Giannella R., Christensen M., De Angelis R., Gottardi N., Lauro-Taroni L., Mattioli M., Pasini D.</i>	I-279
1-84 Scaling of impurity transport in JET, <i>Pasini D., Giannella R., Lauro-Taroni L., Magyar G., Mattioli M.</i>	I-283
1-85 Particle and impurity transport in JET versus neoclassical theory, <i>Lauro-Taroni L., Giannella R.</i>	I-287
1-86 Components of P_{rad} and Z_{eff} derived from X-ray spectroscopy of the main impurities in JET, <i>Barnsley R., Brzozowski J., Coffey I.H., Lawson K.D., Melnick I.M., Patel A., Patel T.K., Peacock N.J.</i>	I-291
1-87 Effective ion charge and impurity behavior in the Frascati tokamak upgrade, <i>McNeill D.H., Zanza V., Mazzitelli G., Bracco G., Condrea I., De Angelis R., Orsitto F., Panaccione L., Segre S.</i>	I-295
1-88 Studies of impurity confinement injected by laser blow-off in the TJ-1 tokamak, <i>Zurro B., Vega J., Aragon F., Burgos C., Pacios L., Pardo C.</i>	I-299
1-89 Toroidal diffusion of injected impurities in the MT-1M tokamak, <i>Zoletnik S., Veres G., Bakos J.S., Bürger G., Ignacz P.N., Kardon B., Kalvin S., Kocsis G., Szigeti J.</i>	I-303
1-94 Long pulse operation in JET, <i>Brusati M., Bures M., Clements S., Ehrenberg J., Horton L., Jones T.T.C., Lawson K., Lomas P., Morgan P., Nielsen P., Sartori R., Schmidt G., Stamp M., Summers D.</i>	I-307
1-95 Evolution of the current profile in JET high bootstrap current plasmas, <i>O'Rourke J., Challis C.D., Jacquinot J., O'Brien D., Stamp M.F., Stork D., Stubberfield P., Tibone F., Tubbing B.J., Zwingmann W.</i>	I-311
1-96 Bootstrap current driven by alpha particles in a fusion reacting tokamak, <i>Chang C.S.</i>	I-315
1-97 Fast wave spectral properties in ITER tokamak, <i>Elfimov A.G., Medvedev S.Yu., Pestryakova G.A.</i>	I-319
1-99 Expansion of the ablated pellet substance along the magnetic field lines, <i>Spathis P.N., Lengyel L.L.</i>	I-323
1-100 Identification of ion cyclotron emission from fusion alpha particles during JET deuterium-tritium experiments, <i>Cottrell G.A., Bhatnagar V.P., da Costa O., Dendy R.O., Edwards A., Jacquinot J., Nave M.F.F., Schmid M., Sibley A., Smeulders P., Start D.F.H.</i>	I-327
1-102 MHD limiting phenomena in high performance JET plasmas, <i>Alper B., Edwards A.W., Gill R.D., Pasini D., Smeulders P.</i>	I-331
1-103 High- β_p MHD activity in JET, <i>Hender T.C., Alper B., Ali-Arshad S., DeBlank H.J., Challis D.C., Gimblett C., Han J., Jacquinot J., Kramer G.J., Kerner W., Nave M.F., O'Brien D.P., O'Rourke J., Smeulders P., Stamp M., Summers D., Tibone F., Tubbing B., Zolfaghari A., Zwingmann P.W.</i>	I-335

Poster-No. Title, Author(s)	Volume/Pg
1-104 High β studies in the H-mode and hot ion H-mode in JET, <i>Stork D., Alper B., Ali-Arshad S., De Blank H.J., De Esch H.P.L., Edwards A., Hender T.C., König R., Kramer G., Marcus F.B., Nave M.F., O'Brien D.P., O'Rourke J., Smeulders P., Stamp M., Tibone F., Tubbing B.J.D., Zolfaghari A., Zwingmann P.W.</i>	I-31
1-105 Ideal-MHD operational limits for highly elongated tokamaks, <i>Eriksson G., Bondeson A., Ward D.J., Hofmann F., Villard L.</i>	I-34
1-107 Fine structure in tokamak operating region, <i>Li L.H., Deng C.B., Li G.X., Guo D.Q., Xie J.K., Huang R.</i>	I-34
1-108 The high density and high β_{pol} disruption mechanism on TFTR, <i>Fredrickson E., Manickam J., McGuire K.M., Monticello D., Nagayama Y., Park W., Taylor G., Drake J.F., Kleva R.G.</i>	I-35
1-109 Generation and loss mechanisms of runaway electrons following disruptions in JET, <i>Gill R.D., Edwards A.W.</i>	I-35
1-110 Density turbulence and disruptive phenomena in TEXTOR, <i>Waidmann G., Jadoul M., Kuang G.</i>	I-35
1-111 Electron density profile and microturbulence modification by MHD instabilities, <i>Brower D.L., Yu C.X., Jiang Y., Chen J.Y., Lin H., Luhmann Jr. N.C., Peebles W.A., Yang X.Z., Zhao S.J.</i>	I-36
1-112 Investigation of tearing modes with toroidal coupling in a tokamak with arbitrary cross-section and aspect ratio, <i>Atanasii C.V., Zakharov L.E., Subbotin A.A., Chudin N.V.</i>	I-36
1-115 Internal MHD perturbations in T-10 tokamak, <i>Savrukhin P., Kislov D., Lyadina E., Razumova K., Bagdasarov A., Volkov V.</i>	I-37
1-117 The sawtooth collapse in rotating JET plasmas, <i>Büchse R., Campbell D.J., Edwards A.W., Gill R.D.</i>	I-37
1-118 A comparison of JET sawtooth behaviour in plasmas with co- and counter-neutral beam injection, <i>Edwards A.W., Bickley A., Büchse R., Challis C.D., König R., Marcus F.B., O'Rourke J., Stork D.</i>	I-37
1-119 Investigation of the sawtooth precursor oscillations of electron density and electron temperature in ohmic tokamak discharges on TEXTOR, <i>Koslowski H.R., Krämer-Flecken A.</i>	I-38
1-120 The influence of mode locking by resonant helical fields on fluctuations induced particle transport in Tokoloshe Tokamak, <i>Van Vurren G.W., Roberts D.E., Fletcher J.D., Hellberg M.A., De Villiers J.A.M.</i>	I-38
1-122 Sawtooth oscillations with q_0 , the safety factor on axis, below unity, <i>Anderson D., Kolesnichenko Ya.I., Lisak M., Wising F., Yakovenko Y.V.</i>	I-39
1-123 Sawtooth activity and photoneutron production, <i>Guo G.C., Zhong Y.Z., Dong J.F., Fu B.Z., Yang J.W., Zhang G.Y., Liang W.X., Gong D.F., Shi M.L.</i>	I-39

Poster-No. Title, Author(s)	Volume/Page
1-124 MHD properties of low-aspect-ratio tokamak plasmas, <i>Gryaznevich M., Bondeson A., Duck R., Hender T., Robinson D.C., Sykes A.</i>	I-399
1-125 Excitation of fast density oscillations by pellet injection and its relation with sawtooth activity in TEXTOR plasmas, <i>Sato K.N., Akiyama H., Kogoshi S., Noda N., Sakamoto M., Dippel K.H., Finken K.H., Fuchs G., Koslovski H.R., Soltwisch H., KFA TEXTOR Team</i>	I-403
1-126 First measurements of fast MHD fluctuations in JET by ECE correlation radiometry, <i>Zolfaghari A., Bartlett D.V., Costley A.E., Crippwell P., Jones S.E., Kesner J., Luckhardt S.C., Porte L., Ramos J.J., Smith R.J., Woskov P.P.</i>	I-407
1-128 Fluid rotation and resonant magnetic perturbations in COMPASS-C, <i>Carolán P.G., Fitzpatrick R., Hender T.C., Morris A.W.</i>	I-411
1-129 A study of the difference in confinement properties between large rotating and large locked modes on Tokoloshe tokamak, <i>Fletcher J.D., Roberts D.E., Nothnagel G., Van Vuuren G.W., De Villiers J.A.M.</i>	I-415
1-130 Activation/inhibition of plasma instabilities caused by resonant magnetic fields, <i>Araujo M.S.T., Vannucci A., Caldas I.L.</i>	I-419
1-131 Feedback stabilisation of resistive tearing modes in tokamaks, <i>Morris A.W., Fitzpatrick R., Hender T.C., O'Brien M.R.</i>	I-423
1-132 Nonlinear mechanism for the suppression of error field magnetic islands by plasma flow, <i>Parker R.D.</i>	I-427
1-133 Observations of beam ion losses in TFTR during TAE modes and other MHD activity, <i>Darrow D.S., Fredrickson E.D., Mynick H.E., Nazikian R., White R.B., Wong K.-L., Zweben S.J., Tuszewski M.</i>	I-431
1-135 Global Alfvén Eigenmodes in DIII-D, <i>Turnbull A.D., Chu M.S., Strait E.J., Heidbrink W.W., Duong H., Lao L.L., Greene J.M., Chance M.S., Taylor T.S.</i>	I-435
1-136 Energetic particle driven instabilities at JET, <i>Nave M.F.F., Borba D., Crippwell P., Von Hellermann M., Kerner W., Porcelli F., Sadler G., Smeulders P.</i>	I-439
1-137 Plasma characteristics during soft disruptions, <i>Lazzaro E., Simonetto A., Tanga A.</i>	I-443
1-138 Disruption behavior of plasma and vacuum vessel in JT-60U, <i>Neyatani Y., Ushigusa K., Matsukawa M., Ninomiya H.</i>	I-447
1-140 Discharge scenarios for the first operational phase of ASDEX-Upgrade, <i>Seidel U., Gruber O., McCarthy P., Cha S.S., Köppendörfer W., Krause A., Mertens V., Woyke W. and ASDEX-Upgrade Team</i>	I-451
1-141 Performance of the equilibrium control system for ASDEX upgrade, <i>Woyke W., Gernhardt J., Gruber O., Jülich A., Lackner K., McCarthy P.J., Seidel U., ASDEX-Upgrade Team</i>	I-455

XIV

Poster-No. Title, Author(s)	Volume/Page
1-142 MHD equilibrium identification on ASDEX-upgrade, <i>Mc Carthy P.J., Schneider W., Lackner K., Zehrfeld H.P., Büchl K., Gernhardt J., Gruber O., Kallenbach A., Lieder G., Wunderlich R., ASDEX-Upgrade Team</i>	I-459
1-143 Volt-second consumption and current ramp experiments on FTU, <i>Apruzzese G., Crisanti F., Frigione D., Kroegler H., Lovisetto L., Mazzitelli G., Podda S., Buratti P., Zerbini M., Romanelli F., Tudisco O.</i>	I-463
1-144 Stabilization of axisymmetric modes and the effects of plasma deformability in elongated tokamak plasmas using active feedback coils inside and outside the vacuum vessel, <i>Ward D.J., Hofmann F.</i>	I-467
1-145 Plasma performance, equilibrium and stability in spherical tokamak GLOBUS, <i>Belyakov V.A., Bender S.E., Kavina A.A., Kostov Yu.A., Minyaev O.A., Vasiliev V.I., Golant V.E., Levitsky A.N., Sakharov N.V., Fedorov O.V., Shakhovets K.G.</i>	I-471
1-146 Rapid controlled shutdown of a burning plasma, <i>Pacher G.W., Pacher H.D.</i>	I-475
1-147 Neutral beam heating in Alvand IIC tokamak, <i>Ghorannevise M., Moradshahi M., Avakian M.</i>	I-479
1-149 Operational start-up and vessel conditioning of the Novillo tokamak, <i>Melendez-Lugo L., Lopez-Callejas R., Valencia-Alvarado R., Chavez-Alarcon E., Colunga-Sanchez S., Jimenez-Dominguez H., Gaytan-Gallardo E.</i>	I-483

Topic 2: Stellarators

Poster-No. Title, Author(s)	Volume/Page
2-1 Confinement studies in recent NBI experiments of Heliotron E, <i>Sano F., Kondo K., Zushi ., Sudo S., Sato M., Mizuuchi T., Matsuura H., Hanatani K., Nakasuga M., OKada H., Besshou S., Nakamura Y., Nagasaki K., Ijiri Y., Iima M., Senju T., Yaguchi K., Baba T., Kobayashi S., Toshi K., Sakamoto K., Wakatani M., Obiki T.</i>	I-489
2-2 Electron heat transport in the LMFP-regime for the stellarators W7-A, W7-AS and L2, <i>Dyabilin K.S., Gasparino U., Maaßberg H., Renner H., Ringler H., W7-AS Team, ECRH Group</i>	I-493
2-3 Diffusive and convective transport modelling from analysis of ECRH-stimulated electron heat wave propagation, <i>Erckmann V., Gasparino U., Giannone L., Hartfuß H.J., Maaßberg H., Tutter M., W7-AS Team, IPF-ECRH Group, KFK-Gyrotron Group</i>	I-497
2-4 Towards higher β in the stellarator Wendelstein W7-AS, <i>Renner H., Ringler H., Kießling J., Kühner G. and the W7AS-Team, NBI-Group</i>	I-501
2-5 The optimum ion confinement mode in W7-A stellarator induced by fast orbit losses of the nearly perpendicular NBI, <i>Gasparino U., Kick M., Maaßberg H., Renner H., Ringler H., Sardei F., W7-AS Team</i>	I-505

Poster-No. Title, Author(s)	Volume/Page
2-6 Local neutral particle density in the W7-AS stellarator, <i>Junker J., Kick M., Maaßberg H., Sardei F., Stroth U., Zöpfel S., WVII AS-Team, NBI-Team</i>	I-509
2-7 ECH power deposition control in CHS, <i>Kubo S., Idei H., Hosokawa M., Takita Y., Iguchi H., Yamada I., Arimoto H., Ueda M., Ida K., Matsuoka K., Morita S., Nishimura K., Okamura S., Takahashi C., Yamada H., Fujiwara M., Noda N., Sagara A., Sanuki H., Todoroki J., Toi K.</i>	I-513
2-8 Density profile and particle transport of NBI-heated plasmas in the low-aspect-ratio Heliotron/torsatron CHS, <i>Iguchi H., Ida K., Morita S., Yamada H., Okamura S., Matsuoka K., Akiyama R., Arimoto H., Hosokawa M., Idei H., Kaneko O., Kohmoto T., Kubo S., Nishimura K., Noda N., Ozaki T., Sagara A., Sakakibara S., Sanuki H., Takeiri Y., Takita Y., Takahashi C., Ueda M., Yamada I., Uchino K., Takenaga H., Muraoka K., Maeda M.</i>	I-517
2-9 Transport studies using modulation of dimensionless parameters in the advanced toroidal facility, <i>Murakami M., Bigelow T.S., Carreras B.A., Dory R.A., Wilgen J.B., Baylor L.R., Dyer G.R., England A.C., Hutchinson D.P., Isler R.C., Jernigan T.C., Ji H., Ma C.H., Morimoto S., Motojima O., Rasmussen D.A., Sato M., Wing W.R., Yamada H., the ATF Group</i>	I-521
2-10 Fluctuation studies of ECH plasmas in the ATF torsatron, <i>Harris J.H., Hanson G.R., Wilgen J.B., Bell J.D., Murakami M., Carreras B.A., Baylor L.R., Aceto S., Bigelow T.S., Colchin R.J., Dunlap J.L., Dominguez N., Dyer G.R., England A.C., Isler R.C., Jernigan T.C., Leboeuf J.N., Lee D.K., Lyon J.F., Ma C.H., Quallis A.L., Rasmussen D.A., Thomas C.E., Uckan T., Zielinski J., Shats M.G., Likin K.M., Sargsyan K.A., Kovrizhnykh L.M.</i>	I-525
2-11 Results of the heavy ion beam probe measurements on the advanced toroidal facility, <i>Aceto S.C., Schwelberger J.G., Connor K.A., Zielinski J.J., Glowienka J.C., Isler R.C., Murakami M., Bell J.D., Uckan T.</i>	I-529
2-13 A general solution of the ripple-averaged kinetic equation (GSRAKE), <i>Beidler C.D., W.D. D'haeseleer</i>	I-533
2-14 Influence of electric fields on the heating efficiency in the W7-AS stellarator, <i>Teubel A., Penningsfeld F.-P.</i>	I-537
2-15 Change of adiabatic invariant in trap-detraping processes in stellarator, <i>Bulanov S.V., Shasharina S.G.</i>	I-541
2-16 -particle behaviour outside the last closed magnetic surface in divertor stellarators, <i>Alladio F., Batistoni P., Mancuso A.</i>	I-545
2-17 Mode activity at high plasma pressure in the stellarator Wendelstein W7-AS, <i>Weller A., Jaenicke R., Kießlinger J., Lazaros A., Maaßberg H., Sardei F., Schwab C., W7-AS Team, ECRH Group, NI Group</i>	I-549
2-18 Finite ion gyro radius stabilization of ideal MHD ballooning modes in optimized stellarators, <i>Nührenberg J., Zheng L.-J.</i>	I-553
2-19 Linear MHD stability computations in 3D plasmas, <i>Cooper W.A., Nakamura Y., Wakatani M., Gruber R., Merazzi S., Anderson D.V., Schwenn U.</i>	I-557
2-20 Interchange modes in torsatrons, heliacs, <i>Jimenez J.A., Varias A., Dominguez N.</i>	I-561

Poster-No. Title, Author(s)	Volume/Page
2-21 Ideal MHD studies of the TJ-IU Torsatron, <i>Alejandro C., Ascasibar E., Garcia L., Lopez-Fraguas A., Varias A., Carreras B., Dominguez N.</i>	I-565
2-22 Progress in the studies of URAGAN-2M stability and transport properties, <i>Besedin N.T., Grekov D.L., Pavlichenko O.S., Shishkin A.A., Zoloukhin A.V., Beidler C.D., Kifflinger J., Maaßberg H., Rau F., Wobig H., Carreras B.A., Dominguez N., Lynch V.E.</i>	I-569
2-23 Destruction of Alfvén modes on a torus due to large nonaxisymmetry, <i>Salat A.</i>	I-573
2-24 Study of magnetic surfaces with islands using the PIES code, <i>Lopez-Fraguas A., Salas A., Reiman A.H., Monticello D.A., Johnson J.L.</i>	I-577
2-25 Modifies vacuum fields and compensation of islands in the stellarator W7-AS, <i>Beidler C., Harmeyer E., Gasparino U., Kifflinger J., Kuhner G., Maaßberg H., Rau F., Ringler H., Wobig H., W7-AS Team, ECRH-Group, W7-X Team</i>	I-581
2-26 Optimization of coils and a sweep coil system for W7-X, <i>Merkel P., Kifflinger J.</i>	I-585
2-27 Anisotropic pressure numerical 3D MHD equilibria, <i>Hirshman S.P., Cooper W.A., Merazzi S., Gruber R.</i>	I-589

Topic 3: Alternative Magnetic Confinement Schemes

Poster-No. Title, Author(s)	Volume/Page
3-1 Confinement studies of a high current density RFP in the extrap T1 upgrade device, <i>Drake J.R., Brzozowski, Brunzell P., Hellblom G., Karlsson P., Mazur S., Nordlund P., Welander A., Zastrow K.-D.</i>	I-595
3-2 Reversed field pinch equilibria and profile dynamics in a high aspect ratio geometry, <i>Nordlund P., Mazur S., Drake J.R.</i>	I-599
3-3 Stability of kink modes in a noncircular z pinch surrounded by a resistive and a conducting wall, <i>Jiang Z.X., Wahlberg C.</i>	I-603
3-4 Studies of edge plasma and impurities in extrap T1 using surface probes, <i>Bergsäter H., Gudowska I., Emmoth B., Tennfors E.</i>	I-607
3-5 Plasma spectroscopy at the extrap T1 RFP experiment, <i>Zastrow K.-D., Horling P., Brzozowski J., Källne E.</i>	I-611
3-6 RFP set-up and confinement in SWIP-RFP device, <i>Zhang P., Fang S., Li J., Luo C., Li Q., Zhang S., Yi P., Xu Y.</i>	I-615

XVII

Poster-No. Title, Author(s)	Volume/Page
3-7 Ion temperature measurements in the reversed field pinch plasmas, <i>Schiavi A., Buffa A., Costa S.</i>	I-619
3-8 Generation of fast electrons by magnetic reconnection processes in RFP plasmas, <i>Erba M., Martin P., Ortolani S., Rossi A.</i>	I-623
3-9 Relaxed states for a driven reverse field pinch, <i>Paccagnella R.</i>	I-627
3-10 Electron diffusion and energy loss in a reversed field pinch plasma, <i>Antoni V., Bagatin M., Martines E.</i>	I-631
3-11 Self-similar solutions for trapping and diffusion of magnetic flux during formation of field-reversed configuration, <i>Bud'ko A., Karlson E.T., Liberman M.A.</i>	I-635
3-12 Study of current drive and particle flux in the SPEX spheromak, <i>Browning P.K., Cunningham G., Gee S.J., Al-Karkhy A., Martin R., Roe G., Rusbridge M.G.</i>	I-639
3-13 Toroidal current enhancement with strong poloidal plasma current drive in FBX-II spherical torus, <i>Irie M.</i>	I-643
3-14 Parametric investigation of the rotamak discharge in a 10-litre spherical vessel, <i>Donaldson N., Hahnheuser R., Jones I.R., Staines G.W., Xu S.</i>	I-647
3-17 An alternative configuration of axially pinched spherical torus, <i>Sinman S., Sinman A.</i>	I-651
3-18 Centrally peaked temperature profiles due to the Ettinghausen effect, <i>Haines M.G., Chittenden J.P.</i>	I-655
3-19 Viscous effects on equilibrium states of isolated z-pinches, <i>Miyamoto T.</i>	I-659
3-21 FIGARO: A large larmor radius stability code, <i>Coppins M., Scheffel J.</i>	I-663
3-22 The interrupted z-pinch dynamics modeling, <i>Kubes P., Kravarik J., Hakr J., Kulhanek P., Pichal J.</i>	I-667
3-23 Stabilization of the long wavelength sausage and kink modes of a Z-pinch by nonlinear radial oscillations, <i>Bud'ko A., Karlson E., Liberman M.A.</i>	I-671
3-25 Ideal and resistive MHD analysis of rotational instabilities in FRC, <i>Sakanaka P.H., Machida M., Honda R.Y., Aramaki E.A., Berni L.A., Santiago M.A.A., Tsui K.-H., Tavares-Azevedo M.</i>	I-675
3-26 Discrete Alfvén waves in reversed field pinches, <i>Sakanaka P.H., Shigueoka H., Azevedo C.A., Assis A.S.</i>	I-679

XVIII

Poster-No. Title, Author(s)	Volume/Page
3-27 Hot spot X-ray and microwave emission of the DPF-78 plasma focus, <i>Antsiferov P., Franz D., Pfau R., Rupasov A., Schmidt H., Schulz D.</i>	I-683
3-28 The relative role of the macroscopic and microscopic phenomena in the plasma focus performance, <i>Zambreanu V., Zoita V.</i>	I-687
3-29 Investigation of charged-particle and X-ray pulses emitted from PF-type discharges, <i>Sadowski M., Szydłowski A., Zebrowski J., Al-Mashhadany E.M.</i>	I-691
3-30 Fusion reaction yield in focused discharges with variable energy and plasma fine structure, <i>Bortolotti A., Brzosko J.S., DeChiara P., Kilic H., Mezzetti F., Nardi V., Powell C., Wang J.</i>	I-695
3-35 Parametric study of mirror plasma based neutron source FEF-II, <i>Mizuno N., Yamaguchi H., Kawabe T., Hirayama S.</i>	I-699
3-37 Direct conversion of a fusion energy into an electric one in the DRACON-trap, <i>Glagolev V.M., Kuvshinov B.N., Proshin M.A., Timofeev A.V.</i>	I-703
3-39 Electrodynamics of plasma-molecular systems with drift motion of charged and neutral particles, <i>Moiseev S.S., Suyazov N.V., Yakimenko I.P.</i>	I-707
3-41 D- ³ He fusion reactor based on a dipole magnetic field, <i>Hasegawa A., Fowler T.K., Mauel M.E.</i>	I-711
3-42 Proposed experiment with injection of a small angular spread beam in the oscillated REB regime, <i>Piffł V., Sunka P., Clupek M., Raus J.</i>	I-713
3-43 Confinement of laser-produced plasma by a strong external magnetic field, <i>Miklaszewski R., Farynski A., Fiedorowicz H., Mroczkowski M., Parys P., Pisarczyk T., Szczurek M.</i>	I-717