

34th EPS Conference on Plasma Physics 2007

(EPS 2007)

Europhysics Conference Abstracts Vol. 31F

**Warsaw, Poland
2-6 July 2007**

Volume 1 of 3

Editors:

Pawel Gasior

Jerzy Wolowski

ISBN: 978-1-62276-334-4

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2007) by the European Physical Society (EPS)
All rights reserved.

Printed by Curran Associates, Inc. (2012)

For permission requests, please contact the European Physical Society (EPS)
at the address below.

European Physical Society (EPS)
6 Rue des Freres Lumoere
F-68060 Mulhouse Cedex
France

Phone: 33 389 32 94 40
Fax: 33 389 32 94 49

secretariat@eps.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Volume 1

SESSION 02 (ORAL)

| | |
|---|----|
| EXPERIMENTS ON FTU WITH A LIQUID LITHIUM LIMITER | 1 |
| <i>G. Mazzitelli</i> | |
| PIC SIMULATIONS OF ELM PARTICLE AND HEAT LOADS TO THE JET DIVERTOR TARGETS | 5 |
| <i>D. Tskhakaya</i> | |
| EFFECT OF RADIATION DAMAGE ON MATERIAL EROSION IN PLASMA | 9 |
| <i>B. I. Khripunov</i> | |
| FUEL RETENTION IN L AND H MODE EXPERIMENTS IN JET | 13 |
| <i>T. Loarer</i> | |
| EROSION OF W AND CFC IN ITER ELMS I TYPE SIMULATION EXPERIMENT FRACTAL NANODUST - STRUCTURE AND PROPERTIES. | 17 |
| <i>L. N. Khimchenko</i> | |
| PROGRESS OF IMPACT FAST IGNITION | 21 |
| <i>M. Murakami</i> | |
| TARGET STUDIES FOR THE HIPER PROJECT | 25 |
| <i>S. Atzeni</i> | |
| IGNITION OF PRE-COMPRESSED TARGETS BY FAST ELECTRONS | 29 |
| <i>J. J. Honrubia</i> | |
| ENHANCEMENT OF THE FILAMENTATION INSTABILITY DUE TO COLLISIONS | 33 |
| <i>M. Fiore</i> | |
| TARGET IONIZATION BY A HIGH CURRENT RELATIVISTIC MONO-ENERGETIC ELECTRON BEAM | 37 |
| <i>A. Debayle</i> | |
| ENHANCEMENT OF THE ELECTRON CONFINEMENT AND TEMPERATURE BY MEANS OF THE TWO FREQUENCY HEATING IN ECR ION SOURCES PLASMAS | 41 |
| <i>D. Mascali</i> | |
| MAGNETIZED DUST FILAMENTS-TO-SKELETON TRANSITION IN ELECTRIC DISCHARGES NUMERICAL MODELING | 45 |
| <i>A. B. Kukushkin</i> | |
| EFFECT OF PLASMA ABSORPTION ON THE TOTAL FORCE ACTING ON A DUST GRAIN IN HIGHLY COLLISIONAL DRIFTING PLASMA | 49 |
| <i>M. Chaudhuri</i> | |
| REFORMULATION OF HAMILTONIAN DYNAMICS FOR DUST PARTICLE INTERACTIONS IN COMPLEX PLASMA | 53 |
| <i>A. A. Samarian</i> | |

SESSION 03 (ORAL)

| | |
|--|----|
| ELECTRON ACCELERATION IN A GAS-DISCHARGE CAPILLARY | 57 |
| <i>A. Popp</i> | |
| ELECTRON SURFACE ACCELERATION BY USING CAPILLARY TARGETS | 61 |
| <i>T. Nakamura</i> | |
| ONIONLIKE SHELL STRUCTURES OF PLASMA GROWN NANOPARTICLES STUDIED BY IN SITU RAYLEIGH-MIE SCATTERING ELLIPSOMETRY | 65 |
| <i>S. Hong</i> | |
| AROMATIC COMPOUNDS IN DUST FORMING PLASMAS | 69 |
| <i>J. Berndt</i> | |
| DUST PARTICLE SYNTHESIS IN N₂ CH₄ GAS MIXTURE CAPACITIVELY COUPLED RADIOFREQUENCY DISCHARGE | 73 |
| <i>L. Boufendi</i> | |

| | |
|---|----|
| STOCHASTIC ACCELERATION OF PARTICLES IN DUST CLOUDS | 77 |
| <i>V. N. Tsytovich</i> | |
| COLLECTIVE PROCESSES IN COLLISIONAL DUSTY PLASMAS OF PLANETARY RINGS | 81 |
| <i>V. V. Yaroshenko</i> | |

SESSION 04 (ORAL)

| | |
|--|-----|
| TOROIDAL FIELD RIPPLE EFFECTS ON H-MODES IN JET AND IMPLICATIONS FOR ITER | 85 |
| <i>R. Sartori</i> | |
| TOROIDAL FIELD RIPPLE AND THE FORMATION OF INTERNAL TRANSPORT BARRIERS | 89 |
| <i>P. C. Devries</i> | |
| NON-LOCALITY AND PERTURBATIVE TRANSPORT | 93 |
| <i>D. Del-Castillo-Negrete</i> | |
| FUSION NEUTRONS PRODUCED IN WIRE-ARRAY Z-PINCH AT S-300 FACILITY | 97 |
| <i>D. Klir</i> | |
| MAGNETIC FIELD DYNAMICS AND NON-LOCALITY IN LASER-PLASMA INTERACTIONS | 101 |
| <i>C. P. Ridgers</i> | |
| LASER INTERACTIONS WITH LOW-DENSITY FOAMS FOR LASER BEAM | 105 |
| <i>J. Limpouch</i> | |
| NEOCLASSICAL AND TRANSPORT DRIVEN PARALLEL SOL FLOWS ON TCV | 109 |
| <i>R. A. Pitts</i> | |
| ON THE LINK BETWEEN FLOWS, TURBULENCE AND ELECTRIC FIELDS IN THE EDGE OF THE TJ-II STELLARATOR | 113 |
| <i>J. A. Alonso</i> | |
| OBSERVATIONS ON GEODESIC ACOUSTIC MODE SCALING AND CORE LOCALIZATION IN ASDEX UPGRADE USING DOPPLER REFLECTOMETRY | 117 |
| <i>G. D. Conway</i> | |
| ELECTRONS IN A DUST FREE VOID HOTTER OR DENSER | 121 |
| <i>V. Land</i> | |
| KINETIC THEORY OF DUSTY PLASMAS FOR LARGE ANGLE SCATTERING | 125 |
| <i>V. N. Tsytovich</i> | |
| DEVELOPMENT OF REAL-TIME CONTROLS IN DYNAMICALLY SELF-REGULATING PLASMAS IN JT-60U | 129 |
| <i>T. Suzuki</i> | |
| THE FIRST DIVERTED PLASMA ON EAST TOKAMAK | 133 |
| <i>B. J. Xiao</i> | |
| CONFINEMENT AND MHD STABILITY OF HIGH-BETA ANISOTROPIC PLASMA IN THE GAS DYNAMIC TRAP | 137 |
| <i>A. A. Lizunov</i> | |
| PARTICLE LOSS SIGNATURES DURING SAWTOOTH EVENTS AT JET | 141 |
| <i>M. Reich</i> | |
| MHD ISSUES IN TORE SUPRA PLASMAS WITH NON-INDUCTIVE CURRENT DRIVE | 145 |
| <i>P. Maget</i> | |
| CORE MHD STUDIES IN THE HYBRID REGIME OF JET OPERATION | 149 |
| <i>P. Buratti</i> | |
| LASER DRIVEN MEV PROTON BEAM FOCUSING BY AUTO-CHARGED ELECTROSTATIC LENS CONFIGURATION | 153 |
| <i>S. Kar</i> | |
| COLLIMATION OF FAST ELECTRONS BY PRE-GENERATION OF MAGNETIC FIELD | 157 |
| <i>A. P. L. Robinson</i> | |
| FUELLING METHODS COMPARISON ABOVE GREENWALD DENSITY IN TORE SUPRA | 160 |
| <i>N. Commaux</i> | |
| CONFINEMENT CHARACTERISTICS OF PELLET-FUELLED PLASMAS IN MAST | 164 |
| <i>M. Valovic</i> | |
| H-MODE EXPERIMENTS AT REDUCED COLLISIONALITY ON ALCATOR C-MOD | 168 |
| <i>A. E. Hubbard</i> | |
| IMPURITY PROFILE CONTROL IN JET PLASMAS WITH RADIO-FREQUENCY POWER INJECTION | 172 |
| <i>L. Carraro</i> | |

| | |
|---|-----|
| THEORETICAL RESOLUTION OF MAGNETIC RECONNECTION IN HIGH ENERGY PLASMAS | 176 |
| <i>B. Coppi</i> | |
| SOLAR PLASMA AND NEUTRINO ASTRONOMY OF HIGH SPATIAL RESOLUTION | 180 |
| <i>V. A. Rantsev-Kartinov</i> | |
| PLASMA RING STRUCTURES IN ASTROPHYSICS RELEVANT THEORETICAL ISSUES | 184 |
| <i>B. Coppi</i> | |

SESSION 05 (ORAL)

| | |
|---|-----|
| STUDIES ON THE CHARACTERISTICS OF THE GAS-DYNAMIC LASER WITH LOW CO₂-CONCENTRATION MEDIUM BY A DIAPHRAGMLESS SHOCK TUBE | 188 |
| <i>K. N. Sato</i> | |
| EXPERIMENTAL AND THEORETICAL INVESTIGATION OF FEMTOSECOND LASER PLASMA | 192 |
| <i>K. V. Khishchenko</i> | |
| INTERACTIONS OF MOVING CHARGES WITH 2D STRONGLY COUPLED DUSTY PLASMAS | 195 |
| <i>L. J. Hou</i> | |
| FLUORESCENT MICROSPHERES AS TRACER PARTICLES IN FINITE DUST CLUSTERS | 199 |
| <i>A. Melzer</i> | |
| ORDER PHENOMENA OF 3D YUKAWA-BALLS | 203 |
| <i>S. Käding</i> | |
| DEPENDANCE OF DUST RESIDUAL CHARGE ON PLASMA PARAMETERS | 207 |
| <i>L. Couëdel</i> | |
| A MODEL OF SKELETAL STRUCTURING OF MAGNETIZED DUST IN A PLASMA FILAMENT IN LABORATORY AND SPACE | 211 |
| <i>A. B. Kukushkin</i> | |
| UNSTABLE MAGNETOHYDRODYNAMICAL CONTINUOUS SPECTRUM OF ACCRETION DISKS | 215 |
| <i>J. W. S. Blokland</i> | |
| PROPERTIES OF DENSE FLUID HYDROGEN AND HELIUM AND IMPLICATIONS FOR GIANT GAS PLANETS | 219 |
| <i>J. Vorberger</i> | |

SESSION P1 (POSTER)

| | |
|---|-----|
| DEPENDENCE OF PLASMA JET FORMING CAPABILITY ON FOCAL POINT POSITIONS OF A FOCUSING LENS | 223 |
| <i>A. Kasperczuk</i> | |
| X-RAY CONVERSION ON GOLD SPHERES. OMEGA EXPERIMENTS | 227 |
| <i>F. Girard</i> | |
| FUSION USING ELECTROSTATIC SHIELDING AND HEATING EFFECT OF CURRENT ALONG WITH LASER ACTION | 231 |
| <i>R. Rajakarthik</i> | |
| FROM LINEAR PERTURBATION COMPUTATION TO FUSION YIELD PREDICTION APPLICATION TO ICF DOUBLE SHELL TARGETS | 235 |
| <i>F. Renaud</i> | |
| SIMULATION OF RAMAN BACKSCATTERING INSTABILITY IN THE INTERACTION OF TWO LASER BEAMS IN PLASMA | 239 |
| <i>N. Sepehrijavan</i> | |
| INCREASE OF THE STIMULATED RAMAN SCATTERING DUE TO THE LANGMUIR DECAY INSTABILITY IN AN INHOMOGENEOUS PLASMA LDI-INFLATION | 243 |
| <i>T. Fouquet</i> | |
| KOVÁSZNAY MODES IN STABILITY OF SELF-SIMILAR ABLATION FLOWS OF ICF | 247 |
| <i>V. Lombard</i> | |
| STUDY OF AXIAL ANISOTROPY OF NEUTRON YIELD IN THE RECONSTRUCTION OF NEUTRON ENERGY SPECTRA IN D-D REACTION | 251 |
| <i>K. Rezac</i> | |
| FAST DEUTERONS AND NEUTRONS IN PLASMA FOCUS DISCHARGE | 255 |
| <i>P. Kubes</i> | |

| | |
|--|-----|
| STUDIES OF DYNAMICS AND STRUCTURE OF CURRENT SHEATH ON PLASMA FOCUS FACILITY PF-3 | 259 |
| <i>K. N. Mitrofanov</i> | |
| X-RAY RADIATION OF PLASMA FOCUS DISCHARGE ON PF-3 FACILITY | 263 |
| <i>V. I. Krauz</i> | |
| PLASMA-WALL HEAT LOADS IN ITER-LIKE ADVANCED TOKAMAK SCENARIOS ON JET | 267 |
| <i>G. Arnoux</i> | |
| DEPOSITION AND TRANSPORT OF 13C FROM METHANE INJECTION INTO OUTER DIVERTOR PLASMA IN JT-60U | 271 |
| <i>Y. Nobuta</i> | |
| SOL FLUCTUATIONS AND CROSS-FIELD TRANSPORT IN LIMITED AND DIVERTED MAGNETIC CONFIGURATIONS IN DIII-D | 275 |
| <i>D. L. Rudakov</i> | |
| CHARACTERIZATION OF TYPE-I ELM INDUCED FILAMENTS IN ASDEX UPGRADE | 279 |
| <i>A. Schmid</i> | |
| ANALYSIS OF CARBON EROSION/DEPOSITION IN THE PRIVATE FLUX REGION OF THE JET MKII-HD DIVERTOR USING QMB TECHNIQUE | 283 |
| <i>H. G. Esser</i> | |
| STATISTICAL PROPERTIES OF EDGE PLASMA TURBULENCE IN SELECTED STELLARATOR PLASMAS IN THE LARGE HELICAL DEVICE | 287 |
| <i>B. Hnat</i> | |
| CALCULATION OF THE MAST PEDESTAL IONISATION PROFILE FROM BOUNDARY PLASMA RECONSTRUCTION | 291 |
| <i>S. Lisgo</i> | |
| CARBON MIGRATION DURING JET 13C EXPERIMENTS | 295 |
| <i>J. D. Strachan</i> | |
| ANALYSIS OF LARGE AND SMALL SCALE FLUCTUATIONS IN THE PLASMA EDGE OF ASDEX UPGRADE | 299 |
| <i>B. Kurzan</i> | |
| FUEL DEPOSITION AND MATERIAL MIXING IN A CASTELLATED TUNGSTEN LIMITER | 303 |
| <i>A. Pospieszczyk</i> | |
| INTERACTION OF A LIQUID GALLIUM JET WITH ISTTOK EDGE PLASMAS | 307 |
| <i>R. B. Gomes</i> | |
| CONTROL OF TYPE-I ELMS BY RESONANT MAGNETIC PERTURBATIONS IN ITER SIMILAR SHAPED PLASMAS ON DIII-D | 311 |
| <i>M. E. Fenstermacher</i> | |
| DEUTERIUM RETENTION IN DIFFERENT CARBON MATERIALS EXPOSED IN TEXTOR | 315 |
| <i>A. Kreter</i> | |
| INVESTIGATION OF SPATIALLY RESOLVED H ALPHA SPECTRAL LINE PROFILES OBSERVED IN LHD DIVERTOR REGION | 319 |
| <i>H. Arimoto</i> | |
| EFFECT OF DIVERTOR GEOMETRY ON FUELING PROFILE OF THE CORE PLASMA IN LOW-DENSITY, OHMIC PLASMAS IN ASDEX UPGRADE AND DIII-D | 323 |
| <i>M. Groth</i> | |
| SIMULATING DIVERTOR DETACHMENT OF OHMIC DISCHARGES IN ASDEX UPGRADE USING SOLPS THE ROLE OF CARBON | 327 |
| <i>M. Wischmeier</i> | |
| EVOLUTION OF BE MIGRATION AFTER BE EVAPORATION IN THE JET TOKAMAK | 331 |
| <i>S. Brezinsek</i> | |
| THE ION VELOCITY DISTRIBUTION IN FRONT OF A NEUTRALIZING TARGET | 335 |
| <i>T. Lunt</i> | |
| TIME-DEPENDENT MODELLING OF ELMING H-MODE AT TCV WITH SOLPS5 | 339 |
| <i>B. Gulejova</i> | |
| SCREENING OF INTRINSIC CARBON WITH A STOCHASTIC MAGNETIC BOUNDARY ON TEXTOR-DED | 343 |
| <i>G. Telesca</i> | |
| PARTICLE FLUX AND SURFACE INTERACTION IN EXTRAP T2R | 347 |
| <i>S. Menmuir</i> | |
| MEASUREMENT OF RO-VIBRATIONAL TEMPERATURES USING FULCHER-ALPHA BAND IN H2 AND D2 MIXTURE PLASMAS | 351 |
| <i>T. Shikama</i> | |

| | |
|--|------------|
| OBSERVATION OF SELF-ORGANIZED FILMS STRUCTURE IN TOKAMAK T-10 AND PLASMA GUN QSPA-FACILITY | 355 |
| <i>S. A. Kamneva</i> | |
| STRIKE-POINT- AND ELM-DEPENDENT CARBON MIGRATION IN THE JET INNER DIVERTOR..... | 359 |
| <i>S. Brezinsek</i> | |
| PHYSICS ISSUES AND SIMULATION OF THE JT-60 SA DIVERTOR FOR LARGE HEAT AND PARTICLE HANDLING..... | 363 |
| <i>N. Asakura</i> | |
| IMPURITY INFLUX IN THE ALL TUNGSTEN ASDEX UPGRADE..... | 367 |
| <i>R. Dux</i> | |
| INFRA RED THERMOGRAPHY OF ELM-DIVERTOR TARGET INTERACTIONS ON TCV..... | 371 |
| <i>J. Marki</i> | |
| CARBON EROSION EXPERIMENTS IN THE ITER RELEVANT FLUX REGIME | 375 |
| <i>G. J. Vanrooij</i> | |
| TESTS OF RHODIUM -COATED MOLYBDENUM FIRST MIRRORS FOR ITER DIAGNOSTICS..... | 379 |
| <i>G. Maddaluno</i> | |
| STRUCTURE AND MOTION OF INTER-ELM FILAMENTS IN MAST..... | 383 |
| <i>N. Benayed</i> | |
| MODELLING OF CARBIDE FORMATION AND CHEMICAL EROSION AT PISCES-B USING THE COUPLED ERO-SDTRIMS CODE..... | 387 |
| <i>D. Borodin</i> | |
| LITHIUM GETTERING ON T-10 TOKAMAK..... | 391 |
| <i>S. V. Mirnov</i> | |
| PARALLEL PLASMA FLOW AND RADIAL ELECTRIC FIELD IN THE SCRAPE-OFF LAYER OF ASDEX UPGRADE | 395 |
| <i>H. W. Müller</i> | |
| OPTIMISATION OF THE SHAPE OF THE ITER DIVERTOR DOME..... | 399 |
| <i>A. S. Kukushkin</i> | |
| DIVERTOR RADIATION DISTRIBUTION DURING ELMs IN JET..... | 403 |
| <i>A. Huber</i> | |
| DIVERTOR CHARACTERISATION AND DATA CONSISTENCY IN ASDEX UPGRADE..... | 407 |
| <i>A. Kallenbach</i> | |
| DENSITY PEAKING IN T-10 L-MODE PLASMAS WITH ECRH..... | 411 |
| <i>I. V. Gubarev</i> | |
| ENERGY CONFINEMENT IN HIGH CURRENT RFX-MOD PLASMAS | 415 |
| <i>A. Alfier</i> | |
| POLOIDAL FLOW GENERATION VIA REYNOLDS STRESS IN T-10 TOKAMAK | 419 |
| <i>G. S. Kirnev</i> | |
| THE IMPACT OF TRIANGULARITY ON PLASMA CONFINEMENT TCV EXPERIMENTS VS NON-LINEAR GYROKINETIC MODELLING | 423 |
| <i>A. Marinoni</i> | |
| GEODESIC ACOUSTIC MODE -- RADIAL EXTENSION AND INTERACTION WITH MAGNETIC ISLANDS..... | 427 |
| <i>A. Krämer-Flecken</i> | |
| EXPERIMENTAL ESTIMATION OF NONLINEAR ENERGY TRANSFER IN TWO-DIMENSIONAL PLASMA TURBULENCE..... | 431 |
| <i>P. Manz</i> | |
| PROGRESS ON JOINT EXPERIMENTS ON SMALL TOKAMAKS | 435 |
| <i>M. P. Gryaznevich</i> | |
| STUDIES OF THE NEOCLASSICAL TRANSPORT FOR CNT..... | 439 |
| <i>B. Seiwald</i> | |
| Z DEPENDENCE OF IMPURITY TRANSPORT IN TORE SUPRA LH HEATED PLASMAS | 440 |
| <i>T. Parisot</i> | |
| THREE-DIMENSIONAL DYNAMICS OF TURBULENCE IN THE EDGE OF FUSION PLASMAS | 444 |
| <i>N. Mahdizadeh</i> | |
| POLOIDAL AND TOROIDAL STRUCTURE OF THE DENSITY FLUCTUATIONS IN T-10 AND TEXTOR TOKAMAKS..... | 448 |
| <i>A. V. Khmara</i> | |
| COMPARING TURBULENCE IN L AND H-MODE PLASMAS IN THE SCRAPE-OFF LAYER OF THE ASDEX-UPGRADE TOKAMAK..... | 452 |
| <i>Ghassany. Antar</i> | |

| | |
|---|-----|
| CALCULATIONS OF 1/NU TRANSPORT FOR URAGAN-2M TAKING INTO ACCOUNT THE INFLUENCE OF CURRENT-FEEDS AND DETACHABLE JOINTS OF THE HELICAL WINDING | 456 |
| <i>B. Seiwald</i> | |
| FIRST RESULTS ON H-MODE GENERATION IN THE GLOBUS-M SPHERICAL TOKAMAK | 460 |
| <i>V. K. Gusev</i> | |
| ELECTRON HEATED HYBRID JET DISCHARGES EXPERIMENTAL RESULTS AND MODELING | 464 |
| <i>G. M. D. Hogewij</i> | |
| EXPERIMENTAL INVESTIGATION OF ENERGY CONFINEMENT IN THE HT-7 TOKAMAK | 468 |
| <i>S. Y. Lin</i> | |
| INTERMITTENT TEMPERATURE FLUCTUATIONS IN THE EDGE REGION OF THE SINP TOKAMAK | 472 |
| <i>S. K. Saha</i> | |
| IMPURITY FLOW STUDIES IN RFX-MOD OPERATION WITH REDUCED MHD MODE ACTIVITY | 476 |
| <i>B. Zaniol</i> | |
| MAIN FEATURES OF SELF-CONSISTENT PRESSURE PROFILE FORMATION | 480 |
| <i>K. A. Razumova</i> | |
| CONTROL OF THE OSCILLATORY REGIME BY LOCAL CURRENT PERTURBATION IN ECCD PLASMAS ON TCV | 484 |
| <i>H. Shidara</i> | |
| COUPLED TRANSPORT AND TURBULENCE SIMULATIONS IN THE EDGE OF TOKAMAKS. | 488 |
| <i>Y. Xu</i> | |
| STUDY OF THE STATISTICAL PROPERTIES OF FLUCTUATIONS IN THE PLASMA BOUNDARY REGION OF THE TJ-II STELLARATOR | 492 |
| <i>J. Brotankova</i> | |
| THE CHARACTERIZATION OF EDGE PLASMA INTERMITTENCY IN T-10 AND TCABR TOKAMAKS | 496 |
| <i>V. P. Budaev</i> | |
| EXTRAPOLATION OF ASDEX UPGRADE DISCHARGES TO ITER | 500 |
| <i>G. Tardini</i> | |
| ION TRANSPORT BARRIER FORMATION WITH LOW INJECTED TORQUE IN JET | 504 |
| <i>N. C. Hawkes</i> | |
| PARAMETRIC DEPENDENCES OF IMPURITY TRANSPORT IN NEOCLASSICAL, REACTIVE DRIFT WAVE AND GYROKINETIC DESCRIPTIONS | 508 |
| <i>T. Fueloep</i> | |
| PLASMA RELAXATIONS INDUCED BY GAS-PUFFING AND PLASMA BIASING IN THE CASTOR TOKAMAK | 512 |
| <i>V. Piffel</i> | |
| STATISTICAL PROPERTIES OF L-MODE EDGE PLASMA TURBULENCE FOR THREE DIFFERENT MAGNETIC CONFIGURATIONS IN THE MEGA AMP SPHERICAL TOKAMAK | 516 |
| <i>B. Hnat</i> | |
| THE STUDY OF GAM PROPERTIES IN THE T-10 TOKAMAK | 520 |
| <i>S. V. Perfilov</i> | |
| INVESTIGATION OF THE TURBULENCE INTERMITTENCY IN THE SCRAPE-OFF LAYER DURING THE STATIC DED OPERATION IN TEXTOR | 524 |
| <i>Y. Xu</i> | |
| RECYCLING AND DENSITY CONTROL IN TJ-II PLASMAS BASED ON 1-D TRANSPORT CALCULATIONS | 528 |
| <i>D. López-Bruna</i> | |
| THE ROLE OF ELECTRON-DRIVEN MICROINSTABILITIES IN PARTICLE TRANSPORT DURING ELECTRON INTERNAL TRANSPORT BARRIERS | 532 |
| <i>E. Fable</i> | |
| EFFECT OF EDGE POLARIZATION ON PLASMA TURBULENCE IN TCABR TOKAMAK | 536 |
| <i>R. M. O. Galvão</i> | |
| DEPENDENCES OF ITB CHARACTERISTICS ON PLASMA PARAMETERS IN T-10 REVERSED SHEAR PLASMAS | 540 |
| <i>N. A. Kirneva</i> | |
| RESISTIVE WALL MODE FEEDBACK CONTROL EXPERIMENTS IN EXTRAP T2R | 544 |
| <i>P. R. Brunsell</i> | |

| | |
|---|-----|
| STABILITY OF SUPER DENSE CORE PLASMAS IN LHD | 548 |
| <i>J. H. Harris</i> | |
| BETA SUPPRESSION OF ALFVEN CASCADE MODES IN NSTX | 551 |
| <i>E. D. Fredrickson</i> | |
| IMPLEMENTATION IN THE ORBIT CODE OF RADIAL PERTURBATIONS IN THE RFX-MOD TOROIDAL GEOMETRY | 555 |
| <i>M. Gobbin</i> | |
| MAST HALO CURRENT SIMULATIONS WITH DINA-CH | 559 |
| <i>M. J. Windridge</i> | |
| ECCD PERTURBATIONS AIMED AT MHD AND ITB STUDIES | 563 |
| <i>F. Turco</i> | |
| MULTI-HARMONIC MODES IN W7-AS HIGH-BETA CONFIGURATIONS | 567 |
| <i>A. Weller</i> | |
| REAL TIME MAGNETIC FLUX SURFACE POSITIONS FOR ASDEX UPGRADE | 571 |
| <i>L. Giannone</i> | |
| FAST ION REDISTRIBUTION AND IMPLICATIONS FOR THE HYBRID REGIME | 575 |
| <i>R. Nazikian</i> | |
| SPONTANEOUS QSH IN THE EXTRAP-T2R REVERSED-FIELD PINCH | 579 |
| <i>L. Frassinetti</i> | |
| EDGE LOCALIZED MODE INSTABILITY INFLUENCE ON THE Q-PROFILE MEASURED BY MOTIONAL STARK EFFECT DIAGNOSTIC ON JET | 583 |
| <i>K. Jakubowska</i> | |
| FAST DYNAMICS OF RELAXATION EVENT IN RFX-MOD | 587 |
| <i>M. Zuin</i> | |
| TAE ANTENNA FOR ALFVEN MODE STUDIES ON MAST | 591 |
| <i>R. Martin</i> | |
| ELECTRON DIFFUSIVITY PROFILES IN ECH PLASMAS OF THE TJ-II HELIAC | 595 |
| <i>V. I. Vargas</i> | |
| EXCITATION OF ALFVÉN-LIKE MODES BY LARGE RESONANT MAGNETIC PERTURBATIONS IN OHMIC DISCHARGES | 599 |
| <i>O. Zimmermann</i> | |
| EFFECT OF TOROIDAL FIELD RIPPLE ON PLASMA ROTATION IN JET | 603 |
| <i>P. C. Devries</i> | |
| REDISTRIBUTION OF ICRH FAST IONS IN THE PRESENCE OF FISHBONES AND ALFVEN EIGENMODES | 607 |
| <i>F. Nabais</i> | |
| HIGH-K DENSITY FLUCTUATION EXPERIMENT IN HT-7 TOKAMAK | 611 |
| <i>Li. Yadong</i> | |
| EXPERIMENTAL AND NUMERICAL CHARACTERISATION OF FLUCTUATIONS IN THE SOL OF ASDEX UPGRADE DURING L-MODE AND ELMY H-MODE | 615 |
| <i>R. Schrittwieser</i> | |
| INTEGRATED SCENARIO MODELING OF DIII-D AT DISCHARGES UTILIZING FAST WAVE HEATING AND CURRENT DRIVE | 619 |
| <i>J. M. Park</i> | |
| NUMERICAL SIMULATIONS OF RECYCLING IMPURITY SCREENING ON JET | 623 |
| <i>P. Belo</i> | |
| STUDIES OF IMPURITY ASSIMILATION DURING MASSIVE ARGON GAS INJECTION IN DIII-D | 627 |
| <i>T. C. Jernigan</i> | |
| NON-LINEAR MHD ANALYSIS OF ADVANCED TOKAMAK SCENARIO | 631 |
| <i>N. Schaeffer</i> | |
| IMAGING OF CORE MHD ACTIVITY IN RFX-MOD | 635 |
| <i>F. Bonomo</i> | |
| ELECTRON CYCLOTRON EMISSION MEASUREMENTS OF ROTATING AND INTERACTING MAGNETIC ISLANDS IN DIII-D | 639 |
| <i>F. Volpe</i> | |
| LOCKED NEOCLASSICAL TEARING MODE CONTROL BY MEANS OF APPLIED MAGNETIC PERTURBATIONS AND ELECTRON CYCLOTRON CURRENT DRIVE | 640 |
| <i>F. Volpe</i> | |
| ROTATION FREQUENCIES OF MHD MODES IN ASDEX UPGRADE | 644 |
| <i>J. Schirmer</i> | |

| | |
|--|-----|
| EFFECTS OF ELECTRON CYCLOTRON CURRENT DRIVE, COUNTER-NBI, AND ROTATIONAL ENTRAINMENT ON NEOCLASSICAL TEARING MODE CONTROL IN DIII-D | 648 |
| <i>R. Prater</i> | |
| LINEAR CONTROL MODEL FOR M 0 MODES IN THE RFX-MOD REVERSED FIELD PINCH | 652 |
| <i>A. Pizzimenti</i> | |
| DENSITY DEPENDENCE OF THE TEARING MODE THRESHOLD | 656 |
| <i>K. Loewenbrueck</i> | |
| NEOCLASSICAL TEARING MODE STABILITY AT ITER-LIKE PARAMETERS | 660 |
| <i>R. J. Buttery</i> | |
| TAE INTERNAL STRUCTURE THROUGH HIGH-RESOLUTION SOFT X-RAY MEASUREMENTS IN ASDEX-UPGRADE | 664 |
| <i>P. Piovesan</i> | |
| EXPERIMENTAL DETERMINATION OF THE NBI POWER DEPOSITION AND CONSEQUENCES FOR NBI CURRENT DRIVE | 668 |
| <i>F. Ryter</i> | |
| PRE-IONIZATION EXPERIMENTS IN THE DIII-D TOKAMAK USING X-MODE SECOND HARMONIC ELECTRON CYCLOTRON HEATING | 672 |
| <i>G. L. Jackson</i> | |
| ASSESSMENT OF INDEPENDENT FUELLING AND ELM PACE MAKING BY PELLETT INJECTION IN ITER | 676 |
| <i>A. R. Polevoi</i> | |
| PELLET DRIFT EFFECT STUDIES AT JET | 680 |
| <i>F. Köchl</i> | |
| HIGH HARMONICS FAST WAVE EXPERIMENTS IN THE LARGE HELICAL DEVICE | 684 |
| <i>H. Kasahara</i> | |
| CONFINEMENT OF NBI-ORIGINATED FAST IONS IN TUMAN-3M | 688 |
| <i>V. A. Kornev</i> | |
| FAST ION BEHAVIOUR DURING ICRH EXPERIMENTS ON TORE SUPRA | 692 |
| <i>M. Goniche</i> | |
| ECRH AND TRANSPORT SIMULATION FOR W7-X | 696 |
| <i>Yu. Turkin</i> | |
| MODELING OF A NEGATIVE ION RF SOURCE FOR ITER NBI | 700 |
| <i>D. Wunderlich</i> | |
| OFF-AXIS NBI FAST ION DYNAMICS IN JET | 704 |
| <i>I. Jenkins</i> | |
| SOL CHARACTERISATION AND LH COUPLING MEASUREMENTS IN DIFFERENT PLASMA CONFIGURATIONS AND GAS PUFFING ON JET | 708 |
| <i>M. Goniche</i> | |
| PLASMA EDGE DYNAMICS DURING ALFVEN WAVE INJECTION INTO TCABR PLASMAS | 712 |
| <i>C. Ribeiro</i> | |
| ELECTRON CYCLOTRON WAVE EXPERIMENTS AT THE WEGA STELLARATOR | 716 |
| <i>H. P. Laqua</i> | |
| RESENT EXPERIMENT WITH COMPACT MIRROR CELL AT THE GAS DYNAMIC TRAP | 720 |
| <i>A. V. Anikeev</i> | |
| RELEVANT ADVANCES OF THE IGNITOR PROGRAM | 724 |
| <i>B. Coppi</i> | |
| INITIAL REFERENCE-SPECTRUM RESISTIVE WALL MODE FEEDBACK CONTROL SIMULATION AND MULTIVARIABLE DESIGN | 728 |
| <i>K. E. J. Olofsson</i> | |
| FAST ION CTS DIAGNOSTIC FOR ITER - STATE OF DESIGN | 732 |
| <i>F. Leipold</i> | |
| STATUS OF THE QUASI-POLOIDAL STELLARATOR | 736 |
| <i>J. H. Harris</i> | |
| STATUS OF WENDELSTEIN 7-X CONSTRUCTION | 740 |
| <i>J.-H. Feist</i> | |
| PHYSICS DESIGN OF THE NATIONAL HIGH-POWER ADVANCED TORUS EXPERIMENT | 744 |
| <i>J. E. Menard</i> | |
| EDGE PEDESTAL CHARACTERISATION IN HIGH TRIANGULARITY ADVANCED TOKAMAK SCENARIOS WITH IMPURITY SEEDING AT JET | 748 |
| <i>M. N. A. Beurskens</i> | |

| | |
|---|------------|
| PLASMA START-UP OPTIMISATION WITH 2ND HARMONIC ECR PRE-IONISATION IN T-10 TOKAMAK..... | 752 |
| <i>N. A. Kirneva</i> | |

SESSION P2 (POSTER)

| | |
|---|------------|
| FAST ELECTRON GENERATION BY LONG PULSE LASER..... | 756 |
| <i>H. Sakagami</i> | |
| NUMERICAL SIMULATION OF INTENSE LASER-PLASMA INTERACTION USING AN EULERIAN VLASOV CODE..... | 760 |
| <i>M. Shoucri</i> | |
| INFLUENCE OF IONIZATION ON FAST ELECTRON BEAM COLLIMATION IN SHORT-PULSE HIGH-INTENSITY LASER TARGET INTERACTIONS..... | 764 |
| <i>O. Klimo</i> | |
| NOVEL DIAGNOSTICS FOR THE STUDY OF ELECTRON TRANSPORT IN SOLID MATERIALS..... | 768 |
| <i>P. Koester</i> | |
| COMPUTATIONAL STUDIES FOR FAST HEATING IN FIREX-I..... | 772 |
| <i>T. Johzaki</i> | |
| FUSION REACTION BURN IN A D-T MIXTURE PLASMA..... | 776 |
| <i>A. Sid</i> | |
| THE GDT BASED NEUTRON SOURCE AS A DRIVER IN A SUB-CRITICAL BURNER OF RADIOACTIVE WASTE..... | 780 |
| <i>A. V. Anikeev</i> | |
| OBSERVATION OF HEAT FLUX TO OUTER DIVERTOR PLATE ON THE HL-2A TOKAMAK..... | 784 |
| <i>W. Li</i> | |
| ELM DIVERTOR HEAT LOAD IN NORMAL AND REVERSED FIELD IN ASDEX UPGRADE..... | 788 |
| <i>T. Eich</i> | |
| HIGH PERFORMANCE PLASMA OPERATION ON DIII-D DURING EXTENDED PERIODS WITHOUT BORONIZATION..... | 792 |
| <i>W. P. West</i> | |
| LOW RECYCLING OPERATIONS AND IMPROVED CONFINEMENT IN TOKAMAKS..... | 796 |
| <i>R. Cesario</i> | |

Volume 2

| | |
|--|------------|
| VARIATION OF THE MIDPLANE HEAT FLUX WIDTH WITH PLASMA CURRENT AND HEATING POWER IN NSTX..... | 800 |
| <i>B. Leblanc</i> | |
| PLASMA-EROSION OF CU-NANODIAMOND AND W-NANODIAMOND COMPOSITES..... | 804 |
| <i>P. A. Carvalho</i> | |
| DIVERTOR HEAT FLUX AMELIORATION IN HIGHLY-SHAPED PLASMAS IN THE NATIONAL SPHERICAL TORUS EXPERIMENT - NSTX..... | 808 |
| <i>B. P. Leblanc</i> | |
| ASSESSMENT OF ITER START-UP LIMITER POWER HANDLING ON TORE SUPRA..... | 812 |
| <i>P. Monier-Garbet</i> | |
| INJECTOR OF LITHIUM JET FOR T-10 WALL CONDITIONING..... | 816 |
| <i>B. V. Kuteev</i> | |
| ON THE STATISTICS OF ELM FILAMENTS MEASURED BY FAST LOW FIELD SIDE WALL LANGMUIR PROBES ON TCV..... | 820 |
| <i>A. Bencze</i> | |
| MODELLING OF 13CH4 INJECTION THROUGH GRAPHITE AND TUNGSTEN TEST-LIMITERS IN THE SCRAPE-OFF LAYER OF TEXTOR USING THE COUPLED ERO-SDTRIMSP CODE..... | 824 |
| <i>S. Droste</i> | |
| THE INFLUENCE OF TOROIDAL FIELD RIPPLE ON H-MODE TRANSITIONS ON JET..... | 828 |
| <i>Y. Andrew</i> | |
| SPATIALLY RESOLVED H-ALPHA STUDY OF HYDROGEN RECYCLING AT A LIMITER IN ECRH PLASMAS OF TJ-II..... | 832 |
| <i>E. Delacal</i> | |

| | |
|---|-----|
| GAS BALANCE IN HIGH DENSITY DISCHARGES AT ASDEX UPGRADE | 836 |
| <i>V. Rohde</i> | |
| SURVEY OF RESULTS ON PLASMA BIASING IN THE CASTOR TOKAMAK | 840 |
| <i>J. Stockel</i> | |
| INITIAL STUDY COMPARING THE RADIATING DIVERTOR BEHAVIOR IN SINGLE-NULL AND DOUBLE-NULL PLASMAS IN DIII-D | 844 |
| <i>T. W. Petrie</i> | |
| FAST DUST PARTICLES IN TOKAMAK PLASMAS DETECTION AND EFFECTS | 848 |
| <i>C. Castaldo</i> | |
| IMPURITY FLUXES IN THE SCRAPE-OFF LAYER OF ASDEX UPGRADE IN THE FULL TUNGSTEN WALL CONFIGURATION | 852 |
| <i>W. Schustereder</i> | |
| FAST IMAGING OF ELM STRUCTURE IN DIII-D | 856 |
| <i>J. H. Yu</i> | |
| MEASUREMENTS OF PLASMA AND NEUTRAL BEAM COMPOSITION AND IMPURITY ROTATION USING SPECTROSCOPY ON TUMAN-3M TOKAMAK | 860 |
| <i>A. S. Tukachinsky</i> | |
| INTERPRETATION OF H_ALPHA IMAGING DIAGNOSTICS DATA ON ASDEX UPGRADE | 864 |
| <i>J. Harhausen</i> | |
| EDGE ION TEMPERATURE GRADIENTS IN H-MODE DISCHARGES | 868 |
| <i>E. Wolfrum</i> | |
| COMPARISON OF L-MODE AND H-MODE EDGE TURBULENCE IN NSTX WITH THE GPI DIAGNOSTIC | 872 |
| <i>M. Agostini</i> | |
| TF RIPPLE EFFECTS ON THE NBI DEUTERON CONFINEMENT IN JET | 876 |
| <i>P. Devries</i> | |
| COMPETITION BEHAVIOR BETWEEN DRIFT INSTABILITY AND FLUTE INSTABILITY IN BOUNDED LINEAR ECR PLASMA | 880 |
| <i>K. Kamataki</i> | |
| MICROTEARING INSTABILITIES AND ELECTRON TRANSPORT IN THE NSTX SPHERICAL TOKAMAK | 881 |
| <i>K. L. Wong</i> | |
| CHARACTERISATION OF THE 2-DIMENSIONAL EDGE TURBULENCE OF RFX-MOD EXPERIMENT | 885 |
| <i>M. Agostini</i> | |
| DENSITY AND MAGNETIC FLUCTUATION STUDIES ON THE W7-AS STELLARATOR | 889 |
| <i>E. Belonohy</i> | |
| ADVANCED STUDY BY USING THE GEODESIC ACOUSTIC MODE MEASUREMENTS EXPERIMENTAL IDENTIFICATION OF THE SEPARATRIX LOCATION AND SEARCH FOR ZONAL FLOWS FROM | 893 |
| <i>Y. Nagashima</i> | |
| INVESTIGATION OF THE RELATIONSHIP BETWEEN ELM ENERGY LOSS AND PERTURBED ELECTRON TRANSPORT ON NSTX | 897 |
| <i>K. Tritz</i> | |
| STUDY OF Z-DEPENDENCE OF IMPURITY TRANSPORT AT JET | 901 |
| <i>C. Giroud</i> | |
| IMPURITY TRANSPORT STUDIES IN NSTX BEAM HEATED H-MODE PLASMAS | 905 |
| <i>Luis F. Delgado-Aparicio</i> | |
| PARTICLES AND ENERGY STOCHASTIC TRANSPORT IN THE RFX-MOD REVERSED FIELD PINCH EXPERIMENT | 909 |
| <i>D. Terranova</i> | |
| THE EFFECT OF EC HEATING ON IMPURITY TRANSPORT IN TOKAMAK-10 | 913 |
| <i>N. Timchenko</i> | |
| THE IMPACT OF N 2 RESONANT MAGNETIC PERTURBATIONS ON LIMITER H-MODE PLASMAS IN TEXTOR | 917 |
| <i>B. Unterberg</i> | |
| ASSESSMENT OF CONFINEMENT SCALING MODELS FOR W7-AS HIGH-BETA DATA | 921 |
| <i>R. Preuss</i> | |
| IMPROVED CONFINEMENT TRANSITION IN LOWER HYBRID HEATING EXPERIMENT ON FT-2 TOKAMAK | 925 |
| <i>S. I. Lashkul</i> | |

| | |
|---|------|
| MODELING OF L TO H-MODE TRANSITION IN JET | 929 |
| <i>D. Kalupin</i> | |
| ABSOLUTE PLASMA POTENTIAL, RADIAL ELECTRIC FIELD AND TURBULENCE ROTATION VELOCITY MEASUREMENTS IN LOW-DENSITY DISCHARGES ON THE T-10 TOKAMAK | 933 |
| <i>S. V. Perfilov</i> | |
| THE POLOIDAL ASYMMETRY IN PERPENDICULAR PLASMA ROTATION AND RADIAL ELECTRIC FIELD MEASURED WITH CORRELATION REFLECTOMETRY AT TEXTOR | 937 |
| <i>S. Soldatov</i> | |
| PRESSURE PROFILE SHAPE CONSTANCY IN L-MODE STELLARATOR PLASMAS | 941 |
| <i>Yu. N. Dnestrovskij</i> | |
| DEPENDENCE OF ELECTRON TRANSPORT ON HEATING POWER AND Q-PROFILE IN NSTX H-MODES | 945 |
| <i>S. Kaye</i> | |
| PLASMA PROPERTY DEPENDENCES, PROMOTING ABRUPT PLASMA DENSITY PROFILE AND TRANSPORT BARRIER FORMATION | 949 |
| <i>V. I. Maslov</i> | |
| CONFINEMENT, TRANSPORT AND TURBULENCE PROPERTIES OF NSTX PLASMAS | 952 |
| <i>S. M. Kaye</i> | |
| DIAGNOSTICS AND PRELIMINARY OPERATIONS OF A MICROWAVE DISCHARGE PLASMA REACTOR FOR COMPLEX MOLECULES DISSOCIATION | 956 |
| <i>S. Gammino</i> | |
| MASS-SPECTROMETRY INVESTIGATIONS OF HYDROGEN POSITIVE IONS IN AR-H2 AND H2 RADIO-FREQUENCY DISCHARGES | 960 |
| <i>D. G. Dimitriu</i> | |
| PLASMA DECAYS IN DUSTY AFTERGLOW | 964 |
| <i>L. Couëdel</i> | |
| PLASMA PROCESSING OF TUNNELING MAGNETORESISTIVE STRUCTURES | 968 |
| <i>G. Burcea</i> | |
| INFLUENCE OF IONS BOMBARDMENT ON THE BERYLLIUM FILM FORMATION BY THERMIONIC VACUUM ARC METHOD | 969 |
| <i>G. Burcea</i> | |
| PROCESS OF THIN FILM DEPOSITION USING DENSE PLASMA FOCUS | 970 |
| <i>M. Chernyshova</i> | |
| EUV LITHOGRAPHY BASED ON LASER-PLASMA SOURCES AND DEBRIS MITIGATION RECENT DEVELOPMENTS AT ENEA | 974 |
| <i>A. Torre</i> | |
| TOWARD EFFICIENT THREE-DIMENSIONAL NUMERICAL SIMULATIONS OF ULTRA- RELATIVISTIC FLOWS | 978 |
| <i>D. Durante</i> | |
| USING MUTUAL INFORMATION TO QUANTIFY SPATIAL CORRELATION BETWEEN SIMULTANEOUS SPACECRAFT MEASUREMENTS OF SOLAR WIND PLASMA TURBULENCE | 982 |
| <i>R. T. Wicks</i> | |
| PIC SIMULATIONS OF RELATIVISTIC ELECTRON FLOWS THE FASTEST-GROWING MIXED MODE AND THE ELECTROMAGNETIC FINITE GRID INSTABILITY | 986 |
| <i>M. E. Dieckmann</i> | |
| MAGNETIC FIELD EFFECTS ON INSTABILITIES DRIVEN BY A FIELD-ALIGNED RELATIVISTIC WARM ELECTRON BEAM AND WARM BULK ELECTRONS | 990 |
| <i>M. E. Dieckmann</i> | |
| ASPECTS OF SELF-SIMILARITY OF THE FILAMENTATION INSTABILITY | 994 |
| <i>M. E. Dieckmann</i> | |
| PLASMA COLLISIONS AT MILDLY RELATIVISTIC SPEEDS FORMATION OF AN ELECTROSTATIC TURBULENT BOUNDARY LAYER | 998 |
| <i>M. E. Dieckmann</i> | |
| THE PARAMETRIC INSTABILITY IN WEAKLY IONIZED MOLECULAR CLOUDS | 1002 |
| <i>S. V. Vladimirov</i> | |
| INSTABILITY OF DRIFT-ALFVEN WAVE IN COLLISIONAL SOLAR ATMOSPHERE | 1006 |
| <i>J. Vranjes</i> | |
| THE INVESTIGATION OF PARAMETRIC INSTABILITY IN A COLLISIONAL DUSTY PLASMA | 1010 |
| <i>S. V. Vladimirov</i> | |

| | |
|--|------|
| WAVE PROPAGATION IN MOLECULAR CLOUDS | 1014 |
| <i>J. Vranjes</i> | |
| THE SPEED OF LIGHT A CONSTANT | 1018 |
| <i>P. Smeulders</i> | |
| EXPERIMENTAL AND NUMERICAL INVESTIGATIONS OF MECHANISMS FOR AURORAL KILOMETRIC RADIATION | 1022 |
| <i>R. A. Cairns</i> | |
| NUMERICAL MODELING OF DUST SPINNING IN A MAGNETIZED PLASMA | 1026 |
| <i>S. I. Krasheninnikov</i> | |
| DETERMINATION OF THE AVERAGE IONIZATION AND CORONA, LTE AND NLTE REGIMES OF OPTICALLY THIN ALUMINIUM PLASMAS | 1030 |
| <i>R. Rodriguez</i> | |
| SCATTERING OF LOW-ENERGY ELECTRONS BY NOBLE GAS ATOMS IN PARTIALLY IONIZED PLASMA | 1034 |
| <i>T. S. Ramazanov</i> | |
| ANGLE DEPENDENT ACOUSTIC MODE IN WEAKLY IONIZED PLASMAS WITH MAGNETIZED ELECTRONS | 1038 |
| <i>J. Vranjes</i> | |
| REVIEW OF KINETIC THEORY AND APPLICATIONS OF ELECTROMAGNETIC RADIATION SCATTERING BY DUST INDUCED FLUCTUATIONS IN PLASMAS | 1042 |
| <i>V. N. Tsytovich</i> | |
| NON NEUTRAL PLASMAS IN THE CNT STELLARATOR | 1046 |
| <i>Q. R. Marksteiner</i> | |
| MEASUREMENTS OF ROTATIONAL VELOCITY PROFILES IN THE MARYLAND CENTRIFUGAL EXPERIMENT | 1050 |
| <i>R. F. Ellis</i> | |
| EXPERIMENTAL INVESTIGATION OF FREE DECAYING TURBULENCE IN A NON- NEUTRAL PLASMA | 1054 |
| <i>M. Romé</i> | |
| ADIABATIC LARGE AMPLITUDE DOUBLE LAYERS IN POSITIVELY CHARGED DUSTY PLASMA | 1058 |
| <i>M. Djebli</i> | |
| DRIFT WAVE ANTENNA EXCITATION IN TORPEX LOW-FIELD SIDE | 1062 |
| <i>A. Diallo</i> | |
| SHEAR ALFVEN WAVES GENERATED BY A HIGH POWER PULSE AT THE PLASMA FREQUENCY EXPERIMENTS AND THEORY | 1066 |
| <i>B. Vancompernelle</i> | |
| CORRELATION BETWEEN ACCRETION THEORY AND TOROIDAL ROTATION EXPERIMENTS | 1070 |
| <i>B. Coppi</i> | |
| ON THE INTERACTION BETWEEN COMPLEX SPACE CHARGE STRUCTURES IN PLASMA | 1074 |
| <i>D. G. Dimitriu</i> | |
| MULTI-ELECTRODE MEASUREMENT OF ELECTROSTATIC FLUCTUATIONS IN HIGH- DENSITY HELICON LINEAR DEVICE | 1078 |
| <i>K. Terasaka</i> | |
| MEASUREMENT OF ANOMALOUS INTENSITY DISTRIBUTION ON MULTIPLLET LINES IN CARBON-LIKE OXYGEN ION | 1082 |
| <i>T. Kobuchi</i> | |
| REVIEW OF KINETIC THEORY AND APPLICATIONS OF ELECTROMAGNETIC WAVE SCATTERING BY DUST INDUCED FLUCTUATIONS | 1086 |
| <i>V. N. Tsytovich</i> | |
| FEED-BACK CONTROL OF INHOMOGENEOUS PLASMA PARAMETRIC DECAY INSTABILITY | 1090 |
| <i>F. M. Truhachev</i> | |
| RESONANT CHARGE EXCHANGE CROSS-SECTIONS OF IONS IN HELIUM, NEON, ARGON, KRIPTON, XENON, RUBIDIUM, CESIUM, MERCURY | 1094 |
| <i>S. A. Maierov</i> | |
| TYPE I INTERMITTENCY RELATED TO THE DOUBLE LAYER DYNAMICS IN FILAMENT TYPE DISCHARGE PLASMA | 1098 |
| <i>D. G. Dimitriu</i> | |
| THEORY OF ION-MATRIX-SHEATH DYNAMICS | 1102 |
| <i>S. Kuhn</i> | |

| | |
|---|-------------|
| THEORY OF MAGNETIC PRESHEATH -SHEATH TRANSITION | 1106 |
| <i>F. Bint-E-Munir</i> | |
| EQUATIONS OF STATE FOR NICKEL, COPPER AND ZINC AT HIGH ENERGY DENSITIES | 1110 |
| <i>K. V. Khishchenko</i> | |
| COMPLEX PLASMA AFTERGLOW | 1114 |
| <i>L. Couëdel</i> | |
| DATA ACQUISITION SYSTEM FOR AN ADVANCED X-RAY IMAGING CRYSTAL SPECTROMETER USING TWO SEGMENTED POSITION SENSITIVE DETECTOR | 1118 |
| <i>U. W. Nam</i> | |
| FAST VISIBLE CAMERA INSTALLATION AND OPERATION IN JET | 1122 |
| <i>J. A. Alonso</i> | |
| IMPACT OF NEUTRON IRRADIATION ON ITER CANDIDATE HALL SENSORS | 1126 |
| <i>J. Sentkerestiova</i> | |
| HEAT PULSE PROPAGATION STUDIES AROUND MAGNETIC ISLANDS IN TEXTOR | 1130 |
| <i>G. W. Spakman</i> | |
| CALIBRATION METHODS FOR THE MSE DIAGNOSTIC AT ASDEX UPGRADE | 1134 |
| <i>M. Reich</i> | |
| BROADENING OF LITHIUM-LIKE CARBON SPECTRAL LINES EMITTED IN TOKAMAK PLASMAS | 1138 |
| <i>M. Koubiti</i> | |
| ABELISATION OF THE NEUTRON PROFILE DATA AT JET USING MINIMUM FISHER REGULARISATION | 1142 |
| <i>J. Mlynar</i> | |
| IMAGE CHARACTERISTICS OF THE NOVEL X-RAY TUBE FOR THE KSTAR X-RAY IMAGE CRYSTAL SPECTROMETER | 1146 |
| <i>J. G. Bak</i> | |
| VESSEL CURRENT MONITORS FOR KSTAR | 1150 |
| <i>J. G. Bak</i> | |
| TUNGSTEN SPECTROSCOPY FOR THE MEASUREMENT OF W-FLUXES FROM PLASMA FACING COMPONENTS | 1154 |
| <i>A. Pospieszczyk</i> | |
| NEUTRON EMISSION SPECTROSCOPY DIAGNOSIS OF FAST IONS IN RF D 3HE HEATED PLASMAS AT JET | 1158 |
| <i>A. Hjalmarsson</i> | |
| THE UHR CROSS-POLARIZATION SCATTERING EXPERIMENT AT THE FT-2 TOKAMAK | 1162 |
| <i>A. B. Altukhov</i> | |
| COMMISSIONING A MICROWAVE BASED COLLECTIVE THOMSON SCATTERING CTS DIAGNOSTIC ON ASDEX-UPGRADE | 1166 |
| <i>F. Meo</i> | |
| CAPABILITIES OF ALKALI BEAM EMISSION SPECTROSCOPY FOR DENSITY PROFILE AND FLUCTUATION MEASUREMENTS | 1170 |
| <i>I. Pusztai</i> | |
| MEASUREMENT AND ANALYSIS OF TOFOR NEUTRON SPECTRA FROM RF AND NB | 1174 |
| <i>C. Hellesen</i> | |
| ENERGY RESOLVED SOFT X-RAY IMAGING IN THE LARGE HELICAL DEVICE | 1178 |
| <i>C. Suzuki</i> | |
| STATISTICAL ANALYSIS OF TWO POINT CORRELATION FUNCTIONS FOR FLOW VELOCITY MEASUREMENTS | 1182 |
| <i>B. Tal</i> | |
| FAST RADIATION DYNAMICS DURING ELMS IN TCV | 1186 |
| <i>G. Veres</i> | |
| LIF MEASUREMENTS ON AN ATOMIC HELIUM BEAM IN THE EDGE OF A FUSION PLASMA | 1190 |
| <i>M. Krychowiak</i> | |
| EVOLUTION AND THERMAL ANALYSIS OF CARBON DEPOSITS ON TORE SUPRA NEUTRALISER CARBON TILES | 1194 |
| <i>J. L. Gardarein</i> | |
| THE LINE-INTEGRATED PLASMA DENSITY FROM BOTH INTERFEROMETRY AND POLARIMETRY AT JET | 1198 |
| <i>M. Brombin</i> | |
| EXPERIMENTAL RESULTS FROM THE WEGA STELLARATOR | 1202 |
| <i>M. Otte</i> | |

| | |
|--|-------------|
| LOCALIZED TEMPERATURE AND VELOCITY MEASUREMENTS OF C VI IONS USING ACTIVE CXRS SPECTROSCOPY IN THE TJ-II STELLARATOR | 1206 |
| <i>J. M. Carmona</i> | |
| CO- AND COUNTER- VIEWING OBLIQUE ECE MEASUREMENTS DURING ECH AND ECCD ON THE TCV TOKAMAK | 1210 |
| <i>T. P. Goodman</i> | |
| SPECTRAL MEASUREMENTS AND VISUALIZATION OF THE PLASMA PROCESSES DURING EFFECTIVE HEATING IN LOWER HYBRID EXPERIMENT ON FT-2 TOKAMAK | 1214 |
| <i>S. I. Lashkul</i> | |
| RECENT RESULTS OF RADIAL CORRELATION REFLECTOMETRY IN JET | 1218 |
| <i>A. C. A. Figueiredo</i> | |
| OPTIMIZATION OF TWO COLOR POLOIDAL INTERFEROMETER / POLARIMETER FOR ITER | 1222 |
| <i>R. Pavlichenko</i> | |
| SUMMARY OF THE FAST-ION D_α MEASUREMENTS IN VARIOUS PLASMA CONDITIONS IN DIII-D | 1226 |
| <i>W. M. Solomon</i> | |
| MEASUREMENT OF MAGNETIC FIELD USING ARRAY OF INTEGRATED HALL SENSORS ON THE CASTOR TOKAMAK | 1230 |
| <i>I. Duran</i> | |

SESSION P4 (POSTER)

| | |
|--|-------------|
| ANISOTROPIC INSTABILITY IN A LASER HEATED PLASMA REVISITED | 1234 |
| <i>V. T. Tikhonchuk</i> | |
| ANOMALOUS DISPERSION OBSERVED IN NUMERICAL SIMULATION OF ELECTRON GAS DYNAMICS IN THE EXTERNAL CORONA OF LASER GENERATED PLASMA | 1238 |
| <i>K. Rohlena</i> | |
| KINETIC SCATTERING EFFECTS IN LASER PLASMA INTERACTIONS | 1242 |
| <i>T. D. Arber</i> | |
| MASS-CHARGE AND ENERGY SPECTRA OF OXYGEN IONS IN A TWO-ELEMENT LASER-PRODUCED PLASMA | 1246 |
| <i>R. T. Khaydarov</i> | |
| HIGH RESOLUTION LASER SPECTROSCOPY OF EXTREMELY THIN CS-VAPOUR LAYERS | 1250 |
| <i>K. Vaseva</i> | |
| ENHANCEMENT OF KEV X-RAYS AND IONS EMISSION FROM COCKTAIL CU AU TARGET IRRADIATED WITH SUB-NANOSECOND ND GLASS LASER | 1254 |
| <i>S. Chaurasia</i> | |
| GENERATION OF RELATIVISTIC EVEN-HARMONICS IN UNDERDENSE PLASMAS | 1258 |
| <i>F. Fiuza</i> | |
| RADIATION GENERATION IN CLUSTERS | 1262 |
| <i>J. L. Martins</i> | |
| APPLICATION OF SIMPLE COMMERCIAL CCD CAMERAS FOR IMAGING PULSED PLASMA X-RAY SOURCES | 1266 |
| <i>L. Ryce</i> | |
| FOCUSING OF RADIATION FROM CAPILLARY DISCHARGE USING THE EUV OPTICS | 1270 |
| <i>L. Sveda</i> | |
| TEMPORAL PROFILE ANALYSIS OF SELECTED SPECTRAL LINES OF NITROGEN FILLED CAPILLARY DISCHARGE PLASMA | 1274 |
| <i>M. Tamas</i> | |
| MONTE CARLO METHOD FOR PLASMA-FOCUS NEUTRON SPECTRUM RECOVERY -A NEW APPROACH THAT INVOLVES ACCELERATED IONS DISTRIBUTION | 1278 |
| <i>I. M. Ivanova-Stanik</i> | |
| ENHANCEMENT OF THE OUTPUT POWER IN AN HMFCG WITH THE FIXED WALL REFLECTION | 1282 |
| <i>Z. Dong</i> | |
| BENCHMARKING TOKAMAK EDGE MODELLING CODES | 1286 |
| <i>D. P. Coster</i> | |
| APPLICATION OF JET - LIKE PERTURBATION COILS FOR ELM - MITIGATION IN ITER | 1290 |
| <i>A. Nicolai</i> | |

| | |
|---|------|
| MECHANISMS AFFECTING RADIAL ELECTRIC FIELD IN THE TOKAMAK SOL | 1294 |
| <i>A. V. Chankin</i> | |
| PALEOCLASSICAL MODEL FOR ELECTRON TEMPERATURE PEDESTAL | 1298 |
| <i>J. D. Callen</i> | |
| GENERATION OF MESO-SCALE CONVECTIVE STRUCTURES IN TOKAMAK EDGE PLASMA | 1302 |
| <i>S. I. Krasheninnikov</i> | |
| QUASI-NEUTRAL SIMULATIONS OF TOKAMAK SCRAPE-OFF LAYER CURRENTS | 1306 |
| <i>V. Fuchs</i> | |
| FUSION TRITONS AND PLASMA-FACING COMPONENTS IN A FUSION REACTOR | 1310 |
| <i>V. Hynönen</i> | |
| POSSIBLE MECHANISM FOR FILAMENT MOTION IN THE SOL OF A TOKAMAK | 1314 |
| <i>V. Rozhansky</i> | |
| INTEGRATED MODELLING OF PLASMA-WALL INTERACTIONS IN TOKAMAKS WITH B2.5 MIXED MATERIALS, LAYERS AND COATINGS, BUNDLED CHARGE STATES, AND HYDROGEN INVENTORY | 1318 |
| <i>D. Coster</i> | |
| RADIAL ACCELERATION OF SOLID HYDROGEN PELLETS IN HOT TOKAMAK PLASMAS | 1322 |
| <i>T. Szepesi</i> | |
| MELT LAYER DAMAGE SIMULATION OF FIRST WALL BERYLLIUM ARMOUR UNDER HEAT LOAD CAUSED BY ITER TRANSIENT EVENTS | 1326 |
| <i>B. Bazylev</i> | |
| PRELIMINARY NUMERICAL SIMULATIONS OF HIGHLY RADIATIVE JET PLASMAS | 1330 |
| <i>S. Glowacz</i> | |
| GYROKINETIC TOROIDAL FULL-F 5D VLASOV CODE GT5D | 1334 |
| <i>Y. Idomura</i> | |
| VARIANCE REDUCTION IN COMPUTATIONS OF NEOCLASSICAL TRANSPORT IN STELLARATORS USING A DELTA F METHOD | 1338 |
| <i>K. Allmaier</i> | |
| CONTROLLING SHEAR FLOW GENERATION IN A TRANSPORT MODEL | 1342 |
| <i>A. S. Ware</i> | |
| FINITE BETA EFFECTS ON AN ITG TURBULENCE-ZONAL MODE SYSTEM IN TOKAMAK PLASMAS | 1346 |
| <i>N. Miyato</i> | |
| INTERACTION OF PARTICLES WITH SYSTEMS OF MAGNETIC ISLANDS AND EDGE TURBULENCE IN TOKAMAKS IN FULLY HAMILTONIAN APPROACH | 1350 |
| <i>P. Cahyna</i> | |
| GYROKINETIC SIMULATIONS OF ELECTRON DENSITY FLUCTUATIONS AND COMPARISONS WITH MEASUREMENTS | 1354 |
| <i>R. V. Budny</i> | |
| ITG-DRIVEN MOMENTUM TRANSPORT IN A PLASMA SLAB WITH A SHEARED LONGITUDINAL FLOW | 1358 |
| <i>M. C. Varischetti</i> | |
| A NEW THEORY OF SPONTANEOUS TOROIDAL ROTATION AND SOME THOUGHTS ON NEOCLASSICAL POLOIDAL ROTATION IN TOKAMAKS | 1362 |
| <i>M. G. Haines</i> | |
| CONFINEMENT REGIME TRANSITION CONNECTED TO SPONTANEOUS ROTATION REVERSAL AND COLLISION RATES AT THE PLASMA EDGE | 1366 |
| <i>B. Coppi</i> | |
| LIMITS AND POTENTIALITIES OF FOKKER-PLANCK EQUATION IN DESCRIBING ANOMALOUS TRANSPORT | 1370 |
| <i>F. Sattin</i> | |
| COLLISIONAL BULK ION TRANSPORT AND POLOIDAL ROTATION DRIVEN BY NEUTRAL BEAM INJECTION | 1374 |
| <i>S. L. Newton</i> | |
| CHARACTERISATION OF NOISE IN GYROKINETIC FULL-F PARTICLE SIMULATION | 1378 |
| <i>T. P. Kiviniemi</i> | |
| SELF CONSISTENT MHD EQUILIBRIUM IN TURBULENCE SIMULATIONS | 1382 |
| <i>T. T. Ribeiro</i> | |
| RUNAWAY ELECTRON GENERATION DURING PLASMA SHUTDOWN BY PELLETS INJECTION | 1386 |
| <i>H. Smith</i> | |

| | |
|--|-------------|
| 1-D MODEL FOR THE EMERGENCE OF THE PLASMA EDGE SHEAR FLOW LAYER WITH MOMENTUM CONSERVING REYNOLDS STRESS | 1390 |
| <i>I. Calvo</i> | |
| NON-DIFFUSIVE FEATURES OF NEAR-CRITICAL DTEM-TURBULENCE IN THE PRESENCE OF A SUBDOMINANT DIFFUSIVE CHANNEL..... | 1394 |
| <i>J. A. Mier</i> | |
| STUDY OF RESISTIVE EDGE MODES IN AN ITER-LIKE GEOMETRY | 1398 |
| <i>M. Ansarmahmood</i> | |
| CRITICAL TRANSITION MODEL WITH RADIAL STRUCTURE | 1402 |
| <i>J. M. Delgado</i> | |
| PARTICLE TRANSPORT AND MAGNETIC FIELD PROPERTIES IN LOW ASPECT RATIO L 1 HELICAL SYSTEMS | 1406 |
| <i>M. Aizawa</i> | |
| CALCULATIONS OF AN EFFECTIVE RIPPLE FOR A STELLARATOR MAGNETIC FIELD COMPUTED BY THE HINT2 CODE..... | 1410 |
| <i>B. Seiwald</i> | |
| CROSS-FIELD PLASMA PARTICLE TRANSPORT IN STRONG THREE DIMENSIONAL MAGNETIC TURBULENCE WITH SIGNIFICANT COLLISIONALITY | 1414 |
| <i>W. A. Hornsby</i> | |
| VERIFICATION OF THE CAS3D-PERTURBED EQUILIBRIUM CODE IN THE CYLINDRICAL LIMIT | 1418 |
| <i>C. Nuehrenberg</i> | |
| THE PEELING-BALLOONING MODEL REVISITED..... | 1422 |
| <i>C. Konz</i> | |
| RECONSTRUCTION OF TOKAMAK EQUILIBRIA WITH PEDESTAL PROFILES USING THE SPIDER CODE | 1426 |
| <i>S. Yu. Medvedev</i> | |
| MODELING OF MHD EVENTS DURING PELLET-PLASMA INTERACTION IN TOKAMAK | 1430 |
| <i>S. Yu. Medvedev</i> | |
| THE EQUILIBRIUM EQUATION IN SKEW CONFIGURATIONS | 1434 |
| <i>E. A. Evangelidis</i> | |
| THE GENERAL FISHBONE-LIKE DISPERSION RELATION A UNIFIED DESCRIPTION FOR SHEAR ALFVÉN MODE EXCITATIONS | 1437 |
| <i>F. Zonca</i> | |
| THE RADIAL DRIFT INVARIANT IN MIRRORS IN THE PARAXIAL APPROXIMATION | 1441 |
| <i>O. Agren</i> | |
| NUMERICAL STUDY OF FAST ION TRANSPORT INDUCED BY MHD INSTABILITIES | 1445 |
| <i>P. Martin</i> | |
| TWO-FLUID EXTENDED-MHD CALCULATIONS OF COLLISIONLESS RECONNECTION IN MAGNETIZED PLASMAS AND TOROIDAL EQUILIBRIUM..... | 1449 |
| <i>S. C. Jardin</i> | |
| CONTROLLED DYNAMICS OF NEOCLASSICAL TEARING MODES IN A SHEARED FLOW | 1453 |
| <i>S. Nowak</i> | |
| EDGE STABILITY AND BOUNDARY SHAPING IN TOKAMAKS | 1457 |
| <i>S. Yu. Medvedev</i> | |
| ROTATIONAL STABILIZATION AND DESTABILIZATION OF THE RESISTIVE WALL MODES PREDICTIONS OF THE COMPETING MODELS | 1461 |
| <i>V. D. Pustovitov</i> | |
| PELLET INDUCED PERTURBATIONS IN THE PLASMA EDGE | 1465 |
| <i>K. Gal</i> | |
| CONTOUR DYNAMICS KINETIC ELECTRON SIMULATION OF COLLISIONLESS RECONNECTION | 1469 |
| <i>H. J. Deblank</i> | |
| EFFECT OF ASPECT RATIO ON THE STABILITY OF TOKAMAK EDGE MHD MODES..... | 1473 |
| <i>N. Aiba</i> | |
| RESISTIVE WALL MODES STABILIZATION IN THE PRESENCE OF 3D WALL STRUCTURES | 1477 |
| <i>C. V. Atanasiu</i> | |
| TOKAMAKS WITH REVERSED CURRENT DENSITY - CURRENT HOLES, AC OPERATION AND AXISYMMETRIC STABILITY..... | 1481 |
| <i>A. A. Martynov</i> | |
| THE IDEAL EXTERNAL PEELING MODE | 1485 |
| <i>A. J. Webster</i> | |

| | |
|--|------|
| DYNAMICS OF POSITIVE RADIAL ELECTRIC FIELD CREATED BY ECRH-PUMP OUT. | 1489 |
| <i>F. Castejón</i> | |
| A NEW GYROKINETIC QUASI-LINEAR TRANSPORT MODEL | 1493 |
| <i>C. Bourdelle</i> | |
| ION HEATING IN TRANSITIONS TO CERC IN THE STELLARATOR TJ-II | 1497 |
| <i>J. L. Velasco</i> | |
| INFLUENCE OF INTEGER Q-SURFACES ON THE DRIFT OF THE PELLETS DEPOSITED MATERIAL | 1501 |
| <i>B. Pégourié</i> | |
| ELECTRIC FIELD AND POWER FLOW PREDICTIONS FOR ICRF ANTENNAS WITH TOPICA | 1505 |
| <i>B. Vancompernelle</i> | |
| THE PELLETS ACCELERATION CAUSED BY 61649 B-INDUCED DRIFT | 1509 |
| <i>I. Senichenkov</i> | |
| 2D NUMERICAL MODELING OF OX CONVERSION IN SPHERICAL TOKAMAKS | 1513 |
| <i>M. A. Irzak</i> | |
| EFFECT OF THE ELECTRON THERMAL CONDUCTIVITY ON THE STATE PARAMETER DISTRIBUTIONS IN PELLETS WAKES | 1517 |
| <i>P. Lalouis</i> | |
| ALFVEN RESONANCE HEATING IN STRAIGHT FIELD LINE MIRROR | 1521 |
| <i>V. E. Moiseenko</i> | |
| NEAR LH GRILL DENSITY VARIATIONS AS A FUNCTION OF GAS PUFF AND LH POWER | 1525 |
| <i>J. Mailloux</i> | |
| NON-INDUCTIVE CURRENT RAMP UP SCENARIO AND STEADY STATE REGIME OPTIMIZATION FOR COMPONENT TEST FACILITY | 1529 |
| <i>A. Dnestrovskij</i> | |
| ON O-X MODE CONVERSION IN SPHERICAL TOKAMAKS | 1533 |
| <i>A. Popov</i> | |
| SEARCH FOR QUASI-ISODYNAMIC CONFIGURATIONS WITH DIMINISHED PARALLEL CURRENT DENSITY | 1537 |
| <i>J. Nührenberg</i> | |
| HYDROGEN NEUTRAL FRACTION DETERMINATION IN POLYSTYRENE AND LI ABLATION CLOUDS FOR PELLETS CHARGE EXCHANGE DIAGNOSTICS OF FUSION PLASMAS | 1541 |
| <i>P. R. Goncharov</i> | |
| EVALUATIONS OF CXRS SIGNALS IN FUSION PLASMAS FOR VARIOUS IMPURITY SPECIES, SPECTRAL RANGES AND BEAM ENERGIES | 1545 |
| <i>V. Yu. Sergeev</i> | |
| RECONSTRUCTION OF ION TEMPERATURE PROFILE IN T-10 TOKAMAK FROM ANALYSIS OF ENERGY-RESOLVED NEUTRAL-FLUX MEASUREMENTS | 1549 |
| <i>Yu. V. Gott</i> | |
| NUMERICAL DESCRIPTION OF DUST PARTICLES IN PLASMA SHEATH | 1553 |
| <i>H. Kersten</i> | |
| VISUALIZATION OF ION AND NEUTRAL DRAG IN COMPLEX DUSTY PLASMAS | 1557 |
| <i>H. Kersten</i> | |
| RELATIVISTIC ELECTROMAGNETIC SOLITON AND ION VORTICES IN INTENSE LASER INTERACTION WITH SUBCRITICAL PLASMAS | 1561 |
| <i>L. Baiwen</i> | |
| INFLUENCE OF THE PLASMA FRICTION ON THE VELOCITY AUTOCORRELATION FUNCTIONS OF DUSTY PARTICLES | 1565 |
| <i>T. S. Ramazanov</i> | |

Volume 3

| | |
|--|------|
| LINEAR TEARING MODE EQUATIONS FOR LOW COLLISIONALITY | 1569 |
| <i>J. W. Connor</i> | |
| ION COLLECTION BY A SPHERE CALCULATED OVER THE ENTIRE RANGE OF CHARGE-EXCHANGE COLLISIONALITY | 1573 |
| <i>I. H. Hutchinson</i> | |
| DEPENDENCE OF THE RESISTIVE WALL MODE GROWTH RATE ON THE WALL THICKNESS | 1577 |
| <i>V. D. Pustovitov</i> | |

| | |
|--|------|
| PLASMA CONVECTION IN ITER INTEGRATED MODELLING WITH THE CODE TOKES | 1581 |
| <i>I. S. Landman</i> | |
| NUMERICAL INVESTIGATIONS OF PLASMA PARAMETERS IN COMPASS TOKAMAK | 1585 |
| <i>E. Havlickova</i> | |
| SENSITIVITY OF THE ITER OPERATING WINDOW TO VARIATION OF TRANSPORT, MAGNETIC FIELD, AND ELONGATION | 1589 |
| <i>G. W. Pacher</i> | |
| NUMERICAL SIMULATIONS OF THE CHARGING OF DUST PARTICLES BY CONTACT WITH WARM PLASMAS | 1593 |
| <i>W. J. Miloch</i> | |
| VLASOV SIMULATIONS OF PLASMA-WALL INTERACTIONS IN AN ARGON-HELIUM PLASMA | 1597 |
| <i>S. Devaux</i> | |
| DYNAMIC RESPONSES OF DUSTY PLASMA | 1601 |
| <i>V. Land</i> | |
| ANALYSIS OF PRESSURE PROFILES AND TRANSPORT SIMULATIONS OF MAST AND JET DISCHARGES | 1605 |
| <i>Yu. N. Dnestrovskij</i> | |
| EFFECT OF MASS FLUCTUATION ON COLLECTIVE MODES IN A DUSTY PLASMA | 1609 |
| <i>R. Annou</i> | |
| RADIATIVE-COLLISIONAL KINETICS OF RYDBERG ATOMIC STATES IN ASTROPHYSICAL PLASMAS | 1613 |
| <i>M. G. Levashova</i> | |
| EFFECT OF PLASMA FOCUS SHEATH RADIATION ON TARGET EVAPORATION | 1617 |
| <i>M. G. Levashova</i> | |
| CHARACTERIZATION OF THE ELECTROSTATIC POTENTIAL BEHIND AN ABSORBING DUST PARTICLE IN HIGHLY COLLISIONAL DRIFTING PLASMA | 1621 |
| <i>M. Chaudhuri</i> | |
| NONLOCAL VS. DIFFUSION MECHANISMS OF ELECTRON CYCLOTRON RADIATION TRANSPORT IN FUSION REACTOR-GRADE TOKAMAKS | 1625 |
| <i>A. B. Kukushkin</i> | |
| EFFECTIVE FAST WAVE MODE CONVERSION IN DEUTERIUM PLASMAS WITH LARGE HYDROGEN CONCENTRATION | 1629 |
| <i>Ye. O. Kazakov</i> | |
| INFLUENCE OF THE GEOMETRIC FACTORS ON COAXIAL DISCHARGE CHARACTERISTICS | 1633 |
| <i>E. Benova</i> | |
| EFFECTS OF VORTEX-LIKE ELECTRON-POSITRON DISTRIBUTION ON SOLITARY WAVES IN PLASMA | 1637 |
| <i>S. Bahamida</i> | |
| ION-ACOUSTIC SOLITONS IN ELECTRON POSITRON NONTHERMAL PLASMA | 1641 |
| <i>S. Bahamida</i> | |
| FLOW SHEARING AND MOMENTUM BALANCE IN STELLARATORS AND RIPPLED TOKAMAKS | 1645 |
| <i>D. A. Spong</i> | |
| COLLISIONAL EFFECTS IN QUASI-COLLISIONLESS DRIVEN MAGNETIC RECONNECTION | 1649 |
| <i>J. J. Martinell</i> | |
| FAST ION ANISOTROPY DRIVE FOR BI-DIRECTIONAL TORNADO MODES ON JET | 1653 |
| <i>P. Sandquist</i> | |
| MODEL OF LOW PRESSURE DISCHARGE IN CROSSED EXH- FIELDS WITH CLOSED ELECTRON DRIFT | 1657 |
| <i>I. Litovko</i> | |
| MODELLING OF LOW-FREQUENCY ALFVÉNIC ACTIVITY IN WENDELSTEIN 7-AS | 1661 |
| <i>V. V. Lutsenko</i> | |
| SAWTOOTH PACING WITH MODE CONVERSION CURRENT DRIVE ON ALCATOR C-MOD | 1665 |
| <i>S. J. Wukitch</i> | |
| NONLINEAR DYNAMICS OF A TWO-PARTICLE COMPLEX PLASMA IN VERTICAL ALIGNMENT | 1669 |
| <i>A. A. Samarian</i> | |
| ANALYSIS OF FAST IONS DURING ICRF HEATING IN HELIOTRON J | 1673 |
| <i>H. Okada</i> | |

| | |
|---|-------------|
| DEVELOPMENT OF ITB PLASMAS AT HIGH BETA_N AND HIGH TRIANGULARITY IN JET | 1677 |
| <i>J. Mailloux</i> | |
| SIMULATION OF FAST ION ANOMALOUS TRANSPORT IN DIII-D..... | 1681 |
| <i>M. Schneider</i> | |
| EXPERIMENTAL CONDITIONS OF ECRH AND MAGNETIC CONFIGURATION FOR EFFICIENT ELECTRON HEATING IN LARGE HELICAL DEVICE..... | 1685 |
| <i>T. Shimozuma</i> | |
| ANALYSIS OF ANTENNA COUPLING DURING ION CYCLOTRON HEATING EXPERIMENTS AT TEXTOR..... | 1689 |
| <i>G. Vanwassenhove</i> | |
| METALLIC IMPURITY PRODUCTION DURING HIGH POWER RF EXPERIMENTS ON TORE SUPRA TOKAMAK | 1693 |
| <i>O. Meyer</i> | |
| INTERACTION OF PELLETS WITH PLASMA IN STANDARD AND ADVANCED REGIMES AT TPE-RX REVERSED FIELD PINCH EXPERIMENT..... | 1697 |
| <i>F. Auremma</i> | |
| THEORETICAL ANALYSIS OF RF PLASMA PRODUCTION IN URAGAN-2M TORSATRON | 1701 |
| <i>Yu. S. Stadnik</i> | |
| TOROIDAL ROTATION IN OHMIC AND RF HEATED JET PLASMAS..... | 1705 |
| <i>M. F. F. Nave</i> | |
| 28 GHZ START-UP SYSTEM ON MAST..... | 1709 |
| <i>V. F. Shevchenko</i> | |
| HHFW AND EBW RESEARCH ON NSTX | 1713 |
| <i>B. P. Leblanc</i> | |
| GENERATION AND INJECTION OF INTENSIVE GAS AND PLASMA JETS INTO THE GLOBUS-M TOKAMAK | 1717 |
| <i>V. K. Gusev</i> | |
| STUDY OF SPONTANEOUS TRANSITION IN NBI PLASMAS OF HELIOTRON J | 1721 |
| <i>S. Kobayashi</i> | |
| ASSESSMENT OF PROPOSED DESIGN CHANGES TO NEUTRAL BEAM INJECTORS IN ITER AND NBCD CODE BENCHMARK | 1725 |
| <i>T. Oikawa</i> | |
| SIMULATIONS OF TORE SUPRA LOWER HYBRID CURRENT DRIVE EXPERIMENTS..... | 1729 |
| <i>Y. Peysson</i> | |
| HOMOGENEITY AND LONG PULSE OPERATION OF THE IPP RF SOURCE FOR THE ITER NBI SYSTEM..... | 1733 |
| <i>P. Franzen</i> | |

SESSION P5 (POSTER)

| | |
|--|-------------|
| MULTIPLE PULSE SHEATH ACCELERATION AN OPTICAL APPROACH TO SPECTRAL CONTROL | 1737 |
| <i>A. P. L. Robinson</i> | |
| THE RELATIVISTIC QUASI--PLANE WAKE WAVES EXCITATION BY LASER PULSES SEQUENCE WITH TUNEABLE CURVATURE..... | 1741 |
| <i>E. I. Kalinnikova</i> | |
| CHARACTERIZATION OF LASER-GENERATED PLASMA BY ELECTROSTATIC MASS QUADRUPOLE ANALYZER..... | 1745 |
| <i>L. Torrasi</i> | |
| HIGHLY COLLIMATED, HIGH-CURRENT HEAVY ION BEAMS FROM THE SUBNANOSECOND LASER-PLASMA INTERACTION..... | 1749 |
| <i>J. Badziak</i> | |
| TWO-DIMENSIONAL PIC SIMULATIONS OF ION ACCELERATION BY ULTRAINTENSE FEMTOSECOND LASER PULSES..... | 1753 |
| <i>J. Psikal</i> | |
| DIAMOND DETECTORS FOR CHARACTERIZATION OF LASER-GENERATED PLASMA | 1757 |
| <i>L. Torrasi</i> | |
| INFLUENCE OF AXIAL MAGNETIC FIELD TRAP ON LASER GENERATED PLASMA..... | 1761 |
| <i>L. Torrasi</i> | |
| ION ACCELERATION BY A STRONG LASER-DRIVEN QUASI-STATIC ELECTRIC FIELD..... | 1765 |
| <i>M. Lontano</i> | |

| | |
|---|------|
| NUMERICAL SIMULATION OF WAKE-FIELD ACCELERATION USING AN EULERIAN VLASOV CODE | 1769 |
| <i>M. Shoucri</i> | |
| AN ANALYTICAL MODEL OF PLASMA CAVITY FOR PRODUCING OF QUASI-MONOENERGETIC ELECTRON IN INTENSE LASER-PLASMA INTERACTION | 1773 |
| <i>P. Zobdeh</i> | |
| FEMTOSECOND LASER PULSE INDUCED COULOMB EXPLOSION | 1777 |
| <i>R. Annou</i> | |
| EXCITATION OF WAKEFIELDS IN A PLASMA CHANNEL BY A LASER PULSE | 1781 |
| <i>R. Annou</i> | |
| NUMERICAL EVALUATION OF RIPPLE-INDUCED DIFFUSION OF SUPRATHERMAL IONS IN TOKAMAKS | 1785 |
| <i>H. Mimata</i> | |
| ELECTROSTATIC SOLITARY STRUCTURES IN A NONTHERMAL PLASMA | 1789 |
| <i>K. Annou</i> | |
| EFFECT OF NONTHERMAL ION DISTRIBUTION AND DUST TEMPERATURE ON NONLINEAR DUST ACOUSTIC SOLITARY WAVES | 1793 |
| <i>K. Annou</i> | |
| FUGACITY AND LINEAR WAVES IN SELF-GRAVITATING NON-IDEAL DUSTY PLASMAS | 1797 |
| <i>K. Annou</i> | |
| SIMULATIONS OF BETA SCAN EXPERIMENTS USING THEORY-BASED TRANSPORT MODELS | 1801 |
| <i>L. Laborde</i> | |
| DIPERSION EQUATIONS ANALYSIS FOR HORSESHOE AND RING DISTRIBUTION FUNCTION CYCLOTRON MASER INSTABILITIES | 1805 |
| <i>I. Vorgul</i> | |
| DUST IN MAGNETIZED SHEATH | 1809 |
| <i>A. Samarian</i> | |
| ION-ATOM COLLISION SIMULATION IN DC PLASMA | 1813 |
| <i>S. A. Maiorov</i> | |
| BEHAVIOUR OF THE MASS-TRANSFER EVOLUTION FUNCTION IN QUASI-2D SYSTEMS IN DUSTY PLASMA OF RF-DISCHARGES | 1817 |
| <i>X. G. Adamovich</i> | |
| NORMAL MODE DYNAMICS OF YUKAWA BALLS | 1821 |
| <i>Y. Ivanov</i> | |
| PHASE TRANSITIONS IN MESOSCOPIC DUST CRYSTALS | 1825 |
| <i>H. Baumgartner</i> | |
| DENSITY PROFILE OF STRONGLY CORRELATED SPHERICAL YUKAWA PLASMAS | 1829 |
| <i>H. Baumgartner</i> | |
| DUSTY PLASMA AT CRYOGENIC GAS TEMPERATURES | 1833 |
| <i>S. A. Maiorov</i> | |
| EFFECTIVE CHARGE OF DUST GRAIN IN DC PLASMA | 1837 |
| <i>S. A. Maiorov</i> | |
| EFFECT OF GRAIN SIZE ON DUST CHARGING IN AN RF PLASMA | 1841 |
| <i>V. R. Ikkurthi</i> | |
| MODELING DUST IN PLASMAS FROM 2D DUST CRYSTALS TO COULOMB BALLS | 1845 |
| <i>K. Matyash</i> | |
| CRITERION FOR THE OUT-OF-PLANE INSTABILITY OF 2D-CRYSTALS | 1849 |
| <i>V. N. Tsytovich</i> | |
| DUST CLOUD DYNAMICS DURING PARTICLE SUCCESSIVE GENERATIONS | 1853 |
| <i>M. Mikikian</i> | |
| STUDY OF HYDROCARBON DUST PARTICLE FORMATION IN AR-CH4 RADIOFREQUENCY LOW PRESSURE DISCHARGE | 1857 |
| <i>L. Boufendi</i> | |
| TUNING THE MATERIAL PROPERTIES OF CARBONACEOUS NANOPARTICLES BY GAS MIXTURE VARIATION | 1861 |
| <i>E. Kovacevic</i> | |
| MECHANISMS OF SHOCK WAVE GENERATION AND DIFFERENT SCENARIOS OF SECOND BREAKDOWN DEVELOPMENT UPON ELECTRICAL EXPLOSION OF WIRES | 1865 |
| <i>V. M. Romanova</i> | |
| BEAM TRACING DESCRIPTION OF LH WAVES IN TOKAMAKS | 1869 |
| <i>N. Bertelli</i> | |

| | |
|--|------|
| OPTIMIZING CENTRAL ELECTRON BERNSTEIN WAVE DEPOSITION VIA O-X-B DOUBLE MODE CONVERSION IN THE TCV TOKAMAK | 1873 |
| <i>L. Curchod</i> | |
| DUSTY PLASMA DYNAMICS DURING A VOID INSTABILITY HEARTBEAT INSTABILITY | 1877 |
| <i>M. Mikikian</i> | |
| GAUSSIAN BEAM OPTIMIZATION FOR O-X MODE CONVERSION | 1881 |
| <i>A. Cappa</i> | |
| EFFECT OF A GAUSSIAN AND LOG-NORMAL GRAIN SIZE-DISTRIBUTIONS ON COHERENT STRUCTURES IN DUSTY PLASMAS | 1885 |
| <i>M. Ishak-Boushaki</i> | |
| DUST ACOUSTIC SOLITONS AND SHOCKS IN A CHARGE VARYING DUSTY PLASMA | 1889 |
| <i>A. Berbri</i> | |
| GEOMETRIC OPTICS OF LOWER HYBRID WAVES IN TOKAMAK PLASMAS | 1893 |
| <i>A. A. Tuccillo</i> | |
| KINETIC ALFVÉN WAVES IN A MAXWELLIAN DUSTY PLASMA | 1897 |
| <i>M. C. Dejuli</i> | |
| SELF-EXCITED DUST DENSITY WAVES IN THE BOUNDARY REGION OF A COMPLEX PLASMA UNDER MICROGRAVITY | 1901 |
| <i>O. Arp</i> | |
| ASYMPTOTIC DESCRIPTION OF HIGH FREQUENCY WAVES IN TOKAMAK | 1905 |
| <i>G. V. Pereverzev</i> | |
| SYNCHRONIZATION OF DUST DENSITY WAVES IN ANODIC PLASMAS | 1909 |
| <i>I. Pilch</i> | |
| THREE-DIMENSIONAL STRUCTURE OF DUST CLOUDS AND WAVE FRONTS IN AN ANODIC PLASMA | 1913 |
| <i>A. Piel</i> | |
| ION ACOUSTIC WAVES IN PLASMAS CONTAINING DUST OR NEGATIVE IONS | 1917 |
| <i>I. Goertz</i> | |
| HELICON MODE FORMATION AND RF POWER DEPOSITION IN A HELICON-PRODUCED PLASMA | 1921 |
| <i>K. Niemi</i> | |
| SOLITARY MODEL OF CHARGED PARTICLE TRANSPORT IN DUSTY PLASMA | 1925 |
| <i>F. M. Truhachev</i> | |
| LOWER HYBRID CURRENT DRIVE EXPERIMENTS IN ALCATOR C-MOD | 1929 |
| <i>R. R. Parker</i> | |
| FIRST MEASUREMENT OF THE DAMPING RATE OF HIGH-N TOROIDAL ALFVEN EIGENMODES IN JET TOKAMAK PLASMAS | 1933 |
| <i>D. Testa</i> | |
| TOMOGRAPHY ON LAO-HIRSCHMAN TYPE OF EQUILIBRIA USING MODE ROTATION | 1937 |
| <i>P. Smeulders</i> | |
| DIAGNOSTIC OF PULSED PLASMA USING PIEZODETECTORS | 1941 |
| <i>B. Ulejczyk</i> | |
| DIAGNOSTICS OF PURE METALLIC CHROMIUM PLASMA | 1945 |
| <i>V. Turcanu</i> | |
| STUDY OF PRESSURE INFLUENCE ON LAST PHASES OF PLASMA FOCUS | 1946 |
| <i>E. Kowalska-Strzeciwiłk</i> | |
| PROBABILISTIC LITHIUM BEAM DATA ANALYSIS | 1950 |
| <i>R. Fischer</i> | |
| OPTIMIZATION OF THE VIEWING CHORD ARRANGEMENT OF THE ITER POLOIDAL POLARIMETER | 1954 |
| <i>T. Yamaguchi</i> | |
| FIRST MEASUREMENTS OF THE OBLIQUE ECE SYSTEM AT JET | 1958 |
| <i>G. Grossetti</i> | |
| DATA PROCESSING OF ELECTRICAL PROBE DATA MEASURED IN TOKAMAKS | 1962 |
| <i>F. M. Dias</i> | |
| STATISTICAL ANALYSIS OF NEUTRAL PARTICLE DIAGNOSTIC DATA | 1966 |
| <i>P. R. Goncharov</i> | |
| BEAM EMISSION SPECTROSCOPY FOR DENSITY TURBULENCE MEASUREMENTS ON MAST | 1970 |
| <i>D. Dunai</i> | |

| | |
|--|-------------|
| SPATIAL DISTRIBUTION OF DD-FUSION NEUTRON EMISSION FROM A PLASMA FOCUS MEASURED WITH THERMOLUMINESCENT DOSIMETERS | 1974 |
| <i>A. Velyhan</i> | |
| ON THE POWER BALANCE AT THE END PLATE OF THE PLASMA COLUMN IN PILOT-PSI..... | 1978 |
| <i>C. Costin</i> | |
| MEASUREMENTS OF INBOARD-OUTBOARD ASYMMETRY OF PEDESTAL TEMPERATURE COLLAPSE DURING TYPE I ELMS IN JET..... | 1982 |
| <i>E. Delaluna</i> | |
| IN-SITU MEASUREMENT OF FUEL RETENTION BY LASER-INDUCED THERMAL DESORPTION OF HYDROCARBON LAYERS IN TEXTOR | 1986 |
| <i>F. Irrek</i> | |
| EVALUATION OF DEPENDENCE OF CURRENT DECAY TIME ON ELECTRON TEMPERATURE MEASURED BY HE I LINE INTENSITY RATIOS IN JT-60U TOKAMAK | 1990 |
| <i>M. Okamoto</i> | |
| COLLECTIVE SCATTERING FROM TURBULENT PLASMAS AND PARTICULE MOTION | 1994 |
| <i>N. Lemoine</i> | |
| LOCAL EMISSION PROFILES FROM IMPURITY IONS AND VISIBLE BREMSSTRAHLUNG IN THE TJ-II STELLARATOR | 1998 |
| <i>A. Baciero</i> | |
| ON THE ABSOLUTE VALUE OF THE DENSITY FLUCTUATION DETERMINED BY FLUCTUATION REFLECTOMETRY | 2002 |
| <i>M. Schubert</i> | |
| NEW SOFT X-RAY MEASUREMENTS AND ASSOCIATED TOMOGRAPHY RECONSTRUCTION ON TORE SUPRA | 2006 |
| <i>D. Mazon</i> | |
| PLASMA POTENTIAL EVOLUTION IN VARIOUS OPERATIONAL MODES IN THE TUMAN-3M TOKAMAK..... | 2010 |
| <i>L. G. Askinazi</i> | |
| PLASMA POTENTIAL AND FLUCTUATION MEASUREMENTS IN THE VINETA HELICON PLASMA WITH A LASER-HEATED EMISSIVE PROBE | 2014 |
| <i>R. Schrittwieser</i> | |
| BAYESIAN DIAGNOSTIC DESIGN OF A MULTICHANNEL INTERFEROMETER..... | 2018 |
| <i>H. Dreier</i> | |
| MEV ION LOSSES MEASUREMENTS IN JET USING ACTIVATION TECHNIQUE..... | 2022 |
| <i>G. Bonheure</i> | |
| STUDIES OF FAST PARTICLE MODES IN ASDEX UPGRADE USING REFLECTOMETRY AND COMPARISON WITH THEORETICAL PREDICTION | 2026 |
| <i>S. Dagraca</i> | |
| APPLICATION OF CHERENKOV DETECTORS FOR FAST ELECTRON MEASUREMENTS IN CASTOR-TOKAMAK..... | 2030 |
| <i>L. Jakubowski</i> | |
| THOMSON SCATTERING DIAGNOSTIC IN HL-2A TOKAMAK | 2034 |
| <i>Y. Huang</i> | |
| LANGMUIR PROBE MEASUREMENTS OF PARTICLE AND HEAT FLUXES AT THE JET MKII-HD DIVERTOR TARGETS..... | 2038 |
| <i>S. Jachmich</i> | |
| ON POSSIBILITY OF TURBULENCE WAVE NUMBER SPECTRA RECONSTRUCTION USING RADIAL CORRELATION REFLECTOMETRY DATA..... | 2042 |
| <i>E. Z. Gusakov</i> | |
| ADVANCED X-RAY IMAGING CRYSTAL SPECTROMETER USING A SEGMENTED POSITION SENSITIVE DETECTOR FOR TOKAMAK PLASMAS..... | 2046 |
| <i>S. G. Lee</i> | |
| IN SITU CALIBRATION AND POSITION MEASUREMENTS OF INITIAL MAGNETIC DIAGNOSTICS FOR THE KSTAR DEVICE..... | 2050 |
| <i>S. G. Lee</i> | |
| SPECTROSCOPIC DIAGNOSTIC OF TUNGSTEN IN FUSION PLASMAS..... | 2054 |
| <i>T. Pütterich</i> | |
| EEDF MEASUREMENTS IN THE CASTOR TOKAMAK USING THE FIRST DERIVATIVE LANGMUIR PROBE METHOD..... | 2058 |
| <i>Tsv. K. Popov</i> | |
| PLASMA POSITION DIAGNOSTICS FOR THE IGNITION EXPERIMENT IGNITOR | 2062 |
| <i>B. Coppi</i> | |

| | |
|---|------|
| RECENT RESULTS FROM CX DIAGNOSTICS AT IOFFE INSTITUTE TOKAMAKS..... | 2066 |
| <i>F. V. Chernyshev</i> | |
| ION MASS SPECTROMETRY IN A MAGNETIZED PLASMA..... | 2070 |
| <i>O. Waldmann</i> | |
| NEUTRAL BEAM START-UP DYNAMICS ON TEXTOR MEASURED BY COLLECTIVE THOMSON SCATTERING CTS | 2074 |
| <i>S. K. Nielsen</i> | |
| AN IN-SITU REALTIME ELLIPSOMETER FOR TEXTOR..... | 2078 |
| <i>T. Dittmar</i> | |
| THE BOLOMETRY CONCEPT FOR THE W7-X STELLARATOR..... | 2082 |
| <i>D. Zhang</i> | |
| CHARGE EXCHANGE RECOMBINATION SPECTROSCOPY MEASUREMENTS FROM MULTIPLE ION SPECIES ON THE JOINT EUROPEAN TORUS..... | 2086 |
| <i>T. M. Biewer</i> | |
| HIGH RF POWER OPERATION ISSUES ON TORE SUPRA..... | 2090 |
| <i>J. Bucalossi</i> | |
| FIRST RESULTS OF FAST ION LOSS DETECTOR IN THE TJ-II STELLARATOR..... | 2094 |
| <i>D. Jimenez-Rey</i> | |
| A NEW ALGORITHM FOR STRIKE-POINT SWEEPING AT JET..... | 2098 |
| <i>F. Villone</i> | |
| A COMPARATIVE STUDY OF IMPURITY AND PROTON POLOIDAL ROTATION IN THE TJ- II STELLARATOR..... | 2102 |
| <i>B. Zurro</i> | |
| PRELIMINARY RESULTS ON THE EAST PLASMA INITIATION AND RAMP-UP..... | 2106 |
| <i>L. Q. Hu</i> | |
| ACTIVE IN-VESSEL COILS AND A CONDUCTING WALL FOR MHD CONTROL IN ASDEX UPGRADE..... | 2110 |
| <i>W. Suttrop</i> | |
| DISRUPTION MITIGATION BY MASSIVE GAS INJECTION AT TEXTOR..... | 2114 |
| <i>S. A. Bozhnikov</i> | |
| HIGH BETA-N JET H-MODES FOR STEADY-STATE APPLICATION..... | 2118 |
| <i>C. D. Challis</i> | |
| 3D EFFECTS OF CONDUCTING STRUCTURES ON RWMS CONTROL IN ITER..... | 2122 |
| <i>F. Villone</i> | |
| DEVELOPMENT OF 20S LONG HYBRID SCENARIOS ON JET..... | 2126 |
| <i>F. Villone</i> | |
| OPERATIONAL SPACE FOR BREMSSTRAHLUNG RADIATION DOMINATED ENERGY OF RUNAWAY ELETRONS IN TOKAMAK PLASMAS..... | 2130 |
| <i>I. Fernandez-Gomez</i> | |
| ANALYSIS OF ECCD SCENARIOS FOR DIFFERENT CONFIGURATIONS OF THE W7-X STELLARATOR..... | 2134 |
| <i>N. B. Marushchenko</i> | |
| NTM PREVENTION BY ICCD CONTROL OF FAST-ION-STABILISED SAWTEETH..... | 2138 |
| <i>S. Coda</i> | |
| ITER HYBRID SCENARIO RESEARCH ON DIII-D..... | 2142 |
| <i>S. L. Allen</i> | |
| ELM TRIGGERING BY LOCAL PELLETT PERTURBATIONS AT JET..... | 2146 |
| <i>P. T. Lang</i> | |
| DISRUPTION DATABASE STUDIES FOR ITER..... | 2150 |
| <i>P. C. Devries</i> | |
| HIGH CURRENT RFPS IN RFX-MOD WITH INDUCED LOCKED MODE ROTATION..... | 2154 |
| <i>S. Martini</i> | |
| TYPE-I ELM MITIGATION IN HIGH TRIANGULARITY AND STEADY STATE REGIMES USING LOW N EXTERNAL MAGNETIC PERTURBATION FIELDS ON JET..... | 2158 |
| <i>H. R. Koslowski</i> | |
| SMALL ELMs IN QUASI-DOUBLE NULL PLASMAS AT JET..... | 2162 |
| <i>I. Nunes</i> | |
| FIRST EXPERIMENTS WITH THE EXTENDED ECRH SYSTEM ON ASDEX UPGRADE..... | 2166 |
| <i>J. Stober</i> | |
| LARGE PERIODIC FLUCTUATIONS OF PLASMA SIGNALS IN EXTRAP T2R..... | 2170 |
| <i>S. Menmuir</i> | |

| | |
|---|------|
| PLASMA SHAPE AND BOUNDARY FLUX CONTROL AT JET WITH THE EXTREME SHAPE CONTROLLER | 2174 |
| <i>M. Ariola</i> | |
| AN EXAMPLE OF A NEW APPROACH FOR THE DEVELOPMENT OF DISRUPTION PROTECTION TOOLS FOR JET THE MODE-LOCK DISRUPTION CLASS | 2178 |
| <i>M. K. Zedda</i> | |
| PLASMA CURRENT RAMP-UP PHASE SIMULATION OF ITER | 2182 |
| <i>S. H. Kim</i> | |
| MAPPING OF THE ASDEX UPGRADE OPERATIONAL SPACE USING CLUSTERING TECHNIQUES | 2186 |
| <i>G. Sias</i> | |
| EXPERIMENTAL IDENTIFICATION OF THE BETA LIMIT IN JET | 2190 |
| <i>M. P. Gryaznevich</i> | |
| DISRUPTION AVOIDANCE BY ECRH POWER ON FTU | 2194 |
| <i>S. Nowak</i> | |
| MODELLING OF ICRH-HEATED RAMP-UP PHASES AT ASDEX UPGRADE IN KSTAR EXPERIMENTAL CONDITIONS | 2198 |
| <i>N. Yong-Su</i> | |
| MODEL OF REAL TIME ITER PLASMA POSITION, SHAPE AND CURRENT CONTROL ON BASE OF DINA CODE | 2202 |
| <i>V. E. Lukash</i> | |
| HYBRID H-MODE SCENARIO WITH NITROGEN SEEDING AND TYPE III ELMS IN JET | 2206 |
| <i>Y. Corre</i> | |
| REAL TIME PLASMA CURRENT AND ELONGATION CONTROL USING ECRH ACTUATORS | 2210 |
| <i>J. I. Paley</i> | |
| RECENT RESULTS ON DISRUPTIONS MITIGATION WITH A NEW FAST VALVE | 2214 |
| <i>G. Pautasso</i> | |

SESSION D1 (POST DEADLINE MONDAY)

| | |
|--|------|
| A SNOW-FLAKE DIVERTOR AND ITS PROPERTIES | 2218 |
| <i>D. D. Ryutov</i> | |
| RECURRENCE QUANTIFICATION ANALYSIS OF ELECTROSTATIC FLUCTUATIONS IN TOKAMAKS | 2222 |
| <i>I. L. Caldas</i> | |
| STABILITY OF ION TEMPERATURE GRADIENT DRIVEN MODES IN THE PRESENCE OF A MAGNETIC ISLAND IN TOKAMAKS | 2226 |
| <i>H. R. Wilson</i> | |
| STEADY-STATE, FULLY BOOTSTRAP-SUSTAINED DISCHARGES IN THE TCV TOKAMAK | 2230 |
| <i>S. Coda</i> | |

SESSION D2 (POST DEADLINE TUESDAY)

| | |
|---|------|
| HARMONIC GENERATION FROM RELATIVISTICALLY OSCILLATING PLASMA SURFACES | 2234 |
| <i>B. Dromey</i> | |
| RELATIVISTIC ELECTRON ACCELERATION IN A WAKE FIELD GENERATED BY THE INTENSE FEMTOSECOND LASER INTERACTION WITH A MID-SIZE DEUTERIUM CLUSTERS JET | 2238 |
| <i>H. J. Liu</i> | |
| A MESH-FREE DARWIN MODEL FOR NON-RADIATIVE PLASMA SIMULATION | 2242 |
| <i>M. Masek</i> | |
| LONGITUDINAL DEMIXING IN A D.C. ARC DISCHARGE IN NEON-ARGON AND NEON-HELIUM ATMOSPHERE | 2246 |
| <i>I. Ksiazek</i> | |
| SIMULATION OF ITER FIRST WALL RADIATION HEAT LOAD DURING THE DISRUPTION | 2250 |
| <i>S. Pestchanyi</i> | |

| | |
|--|------|
| ULTRA-HIGH-INTENSITY EXPERIMENTS AT ULTRA-HIGH CONTRAST | 2254 |
| <i>S. Dobosz</i> | |

SESSION D5 (POST DEADLINE FRIDAY)

| | |
|--|------|
| INVESTIGATION ON LASER-DRIVEN RT INSTABILITY USING SOFT X-RAY LASER | 2258 |
| <i>Z. Fang</i> | |

| | |
|---|------|
| ON THE PROPERTIES OF EDGE LOCALISED DENSITY FLUCTUATIONS OBSERVED IN QUASI-DOUBLE NULL IDENTITY EXPERIMENTS IN JET | 2262 |
| <i>C. P. Perezvonthun</i> | |

Author Index