

Tuesday 26th July, 2011

Home Address: via Isonzo 70, 35143, Padova, Italy
 Work Address: Consorzio RFX, C.so Stati Uniti 4, 35127, Padova, Italy
 ☎: +39 3480664109
 ☎: +39 0498295991
 ☎: +39 0498700718
 ✉: nicola.vianello@igi.cnr.it

Personal Information

Name: Nicola Vianello
 Date and Place of Birth: Mestre-Venezia, 14 August 1975
 Citizenship: Italian
 Address: via Isonzo 70, 35143, Padova, Italy

Education and Qualifications

1994 **High School** Liceo Scientifico U. Morin, Mestre, Venezia, *56 out 60*
 1999 **Laurea in Fisica** Università degli Studi di Padova, Padova, Italy
 (M.Sci Physics) *110 out 110 cum Laude*
 Thesis Title: *Trasporto di particelle ed energia per effetto di turbolenza elettrostatica in plasmi confinati in configurazione Reversed Field Pinch*
 (Particle and energy transport induced by electrostatic turbulence in Reversed Field Pinch plasmas)
 2002 **Ph.D** Università degli Studi di Padova, Padova, Italy
 Thesis Title: *Fenomeni di auto organizzazione e generazione di strutture coerenti in plasmi magnetizzati*
 (Self-organization phenomena and coherent structure generation in magnetized plasmas)

Further Education

2000 October **International School of Plasma Physics and Ultrafast Optics** Capri, Italy
 2001 September **5th Carolus Magnus Euro-Summer School on Plasma and Fusion Energy Physics** Badhonnef, Germany
 2002 January **International School on Topics in Nonlinear Dynamics** Venice, Italy
 2011 June **5th International Iter Summer School** Aix-en-Provence, France
MHD and Energetic Particles

Employment

March-October 1999 **Consorzio RFX, Padova, Italy** Borsista (Research fellow)
 November 2002 - April 2003 **Consorzio RFX, Padova, Italy** Borsista (Research fellow)
 May 2003-April 2005 **Consorzio RFX, Padova, Italy** Researcher
 May 2005-December 2005 **Consorzio RFX, Padova, Italy** Researcher
 January 2006 - July 2009 **Consorzio RFX, Padova, Italy** Researcher, Permanent position
 July 2009 - Date **Istituto Gas Ionizzati del CNR** Researcher, Permanent position
Consiglio Nazionale delle Ricerche
(Research National Institute)
Padova, Italy

Further experiences

2001 5 March-15 June Visiting scientist under Royal Institute of Technology
 EURATOM-Mobility staff movement Stockholm, Sweden
 2002 1 May-30 June Visiting scientist under Royal Institute of Technology
 EURATOM-Mobility staff movement Stockholm, Sweden
 2003 2 March-30 April Visiting scientist under Royal Institute of Technology

2004	19 April -19 June	EURATOM-Mobility staff movement Visiting scientist under EURATOM-Mobility staff movement	Stockholm, Sweden Royal Institute of Technology Stockholm, Sweden
2005	16 October - 19 November	Visiting scientist under EURATOM-Mobility staff movement	Risø National Laboratory Risø, Denmark
2008	11 - 15 February	Visiting scientist under EURATOM-Mobility staff movement	Max-Planck Institut für Plasmaphysik Garching, Germany
2009	12 - 15 May	Visiting scientist under EURATOM-Mobility staff movement	Max-Planck Institut für Plasmaphysik Garching, Germany
2009	09 - 13 November	Visiting scientist under EURATOM-Mobility staff movement	Centre der Recherches en Physique des Plasmas, EPFL, Lausanne, Switzerland
2011	07 - 11 March	Visiting scientist under EURATOM-Mobility staff movement	Royal Institute of Technology Stockholm, Sweden
2011	13 - 15 April	Visiting scientist under EURATOM-Mobility staff movement	The National Fusion Laboratory, CIEMAT Madrid, Spain
2011	23 - 27 May	Visiting scientist under EURATOM-Mobility staff movement	Max-Planck Institut für Plasmaphysik Garching, Germany

National and International Conferences

2000	September	EU-US Turbulence Task Force (TTF) workshop	Varenna, Italy
2002	April	7 th Easter Plasma Meeting	Torino, Italy
2002	June	29 th EPS Conference on Plasma Physics and Controlled Fusion	Montreux, Switzerland
2003	October	45 th APS-Division of Fusion Plasma Physics Conference	Albuquerque, NM, USA
2004	May	10 th IEA/RFP Workshop	Padova, Italy
2004	June	31 st EPS Conference on Plasma Physics	London, UK
2004	September	EU-US Turbulence Task Force (TTF) workshop	Varenna, Italy
2004	November	46 th APS-Division of Fusion Plasma Physics Conference	Savannah, GA, USA
2005	July	8 th International Workshop on the Interrelationship between Plasma Experiments in Laboratory and Space	Tromsø, Norway
2005	September	11 st IEA/RFP Workshop	Madison, WI, USA
2006	June	33 rd EPS Conference on Plasma Physics and Controlled Fusion	Rome, Italy
2006	October	48 th APS-Division of Fusion Plasma Physics Conference	Philadelphia, PA, USA
2007	April	12 th US-EU Transport Taskforce Workshop	San Diego, CA, USA
2007	September	Momentum transport in jets, disks and laboratory plasmas	Alba, Italy
2008	June	35 st EPS Conference on Plasma Physics	Hersonissos, Greece
2008	June	EFTSOMP2008 - Workshop on Electric Fields, Turbulence and Self-Organisation in Magnetized Plasmas	Hersonissos, Greece
2008	September	EU-US Turbulence Task Force (TTF) workshop	Copenhagen, Denmark
2008	October	13 st IEA/RFP Workshop	Stockholm, Sweden
2009	March	Workshop on Cross-Scale Coupling in Plasmas	Cosenza, Italy
2009	June	35 st EPS Conference on Plasma Physics and Controlled Fusion	Sofia, Bulgaria
2009	September	2 nd EFDA Transport Topical Group Meeting	JET, Culham, UK
2010	April	14 st IEA/RFP Workshop	Padova, Italy
2010	November	52 th APS-Division of Fusion Plasma Physics Conference	Chicago, IL, USA

Competition

May 2009: Public selection number 364/13 held by Consiglio Nazionale delle Ricerche with written and oral exams. First position with 104.5 out 120 final rank

Skills

IT skills

Operating systems Linux, Unix, Windows, Mac Os X, Open VMS
Programming Fortran 77/90, IDL (Interactive Data Language), Python, C
 COMSOL, Mathematica, Gnuplot
Office L^AT_EX, Scribus, Office, iWork

Other skills

- (i) Experience in ultra high vacuum technology
- (ii) Experience in designing and projecting electrostatic and magnetic diagnostics for plasma experiments
- (iii) Experience in plasma facing and ultra high vacuum compliant materials
- (iv) Experience in data acquisition through MDSPLUS technology
- (v) Experience in data and image processing

Languages

Language	Oral	Written
Italian	Native	Native
English	Fluent	Fluent

Teaching

I've been assistant in the course FISICA DEI FLUIDI E DEI PLASMI (Fluid and plasma physics) during academica year 2008 and 2009. I've supervised 1 Bachelor and 1 M.Sc. degree the last graduated with 110 out of 110 final mark.

Other

I'm regular referee for Plasma Physics and Controlled Fusion, Nuclear Fusion, New Journal of Physics

Research interest

Plasma Physics and Magnetic Confinement Fusion (Reversed Field Pinches and Tokamaks) both experimentally and via numerical modelling, with emphasis on:

- (a) Electromagnetic turbulence induced transport in the external region of magnetically confined plasmas
- (b) Statistical properties of plasma turbulence, investigated through advanced tools as Wavelet Transforms, Local Intermittency Measurements, Waiting Time distribution
- (c) Coherent structure generation as results of non-linear evolution of plasma instabilities
- (d) Non linear interaction between turbulence and sheared flows
- (e) Sheared flow generation mechanism through non-diagonal part of stress tensor
- (f) Numerical modeling of electromagnetic plasma turbulence using fluid approach

- (g) Filamentation of coherent structure with emphasis on *blobs* observed in laboratory plasmas and *Edge Localized Modes*

The principal results obtained by Dr. Vianello may be summarized as follow:

- First experimental proof of non applicability of *Self Organized Criticality* paradigm to edge plasma turbulence [8, 3]
- First experimental evidence of non-linear generation of edge flow in Reversed Field Pinches through Reynolds stress mechanism [29, 28]
- First experimental measurements of parallel current associated to coherent structures in a laboratory plasma [53]
- First experimental evidence of the existence of a particular class of coherent structure, named *Drift-Kinetic Alfvén vortices*, arising because of the non linear coupling of Drift and Kinetic Alfvén waves in a laboratory plasma [62]. This type of structure has been previously detected in the magnetosphere
- First experimental estimate of parallel current associated to Edge Localized Modes filament [121]

Publications

I have authored a total number of 121 papers and conference proceedings.

h-index factor: 15 according to ISI Web of Knowledge (last update Tuesday 26th July, 2011)

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Refereed research papers

1. Antoni, V, R Cavazzana, L Fattorini, E Martines, G Serianni, M Spolaore, L Tramontin, and N Vianello (2000). Effects of pulsed poloidal current drive on the edge region of a reversed field pinch plasma. *Plasma Physics and Controlled Fusion* 42(8), 893–904.
2. Antoni, V, E Martines, D Desideri, L Fattorini, G Serianni, M Spolaore, L Tramontin, and N Vianello (2000). Electrostatic transport reduction induced by flow shear modification in a reversed field pinch plasma. *Plasma Physics and Controlled Fusion* 42(2), 83–90.
3. Antoni, V, V Carbone, R Cavazzana, G Regnoli, N Vianello, E Spada, L Fattorini, E Martines, G Serianni, M Spolaore, L Tramontin, and P. Veltri (2001). Transport processes in reversed-field-pinch plasmas: Inconsistency with the self-organized-criticality paradigm. *Phys. Rev. Lett.* 87(4), 045001.
4. Antoni, V, V Carbone, E Martines, G Regnoli, G Serianni, N Vianello, and P. Veltri (2001). Electrostatic turbulence intermittency and MHD relaxation phenomena in a RFP plasma. *Europhys Lett* 54(1), 51–57.
5. Antoni, V, M Valisa, L Apolloni, M Bagatin, W. Baker, O Barana, R Bartiromo, P Bettini, A Boboc, T Bolzonella, A Buffa, A Canton, S Cappello, L Carraro, R Cavazzana, G Chitarin, S Costa, F D'Angelo, S. D. Bello, A. D. Lorenzi, D Desideri, D. F Escande, L Fattorini, P Fiorentin, P Franz, E Gaio, L Garzotti, L Giudicotti, F Gnesotto, L Grando, S. Guo, P Innocente, A Intravaia, R Lorenzini, A Luchetta, G Malesani, G Manduchi, G Marchiori, L Marrelli, P Martin, E Martines, S Martini, A Maschio, A Masiello, F Milani, M Moresco, A Murari, P Nielsen, M O'Gorman, S. Ortolani, R Paccagnella, R Pasqualotto, B Pegourie, S Peruzzo, R Piovan, N Pomaro, A Ponno, G Preti, M. Puiatti, G Rostagni, F Sattin, P Scarin, G Serianni, P Sonato, E Spada, G Spizzo, M Spolaore, C Taliercio, G Telesca, D Terranova, V Toigo, L Tramontin, N Vianello, M Viterbo, L Zabeo, P Zaccaria, P Zanca, B Zaniol, L Zanotto, E Zilli, and G Zollino (2001). Transport mechanisms and enhanced confinement studies in RFX. *Nucl. Fusion* 41(4), 431–436.
6. Martines, E, M Spolaore, V Antoni, G Regnoli, N Vianello, R Cavazzana, G Serianni, and L Tramontin (2001). E x B velocity shear and intermittent structures in RFX. *Czechoslovak Journal Of Physics* 51(10), 983–993.
7. Serianni, G, V Antoni, H Bergsaker, P. R Brunzell, J. Drake, M Spolaore, H. Satherblom, and N Vianello (2001). Electrostatic fluxes and plasma rotation in the edge region of EXTRAP-T2R. *Czechoslovak Journal Of Physics* 51(10), 1119–1127.
8. Spada, E, V Carbone, R Cavazzana, L Fattorini, G Regnoli, N Vianello, V Antoni, E Martines, G Serianni, M Spolaore, and L Tramontin (2001). Search of self-organized criticality processes in magnetically confined plasmas: Hints from the reversed field pinch configuration. *Phys. Rev. Lett.* 86(14), 3032–3035.
9. Spolaore, M, V Antoni, M Bagatin, D Desideri, L Fattorini, E Martines, G Serianni, L Tramontin, and N Vianello (2001). Study of edge plasma properties comparing operation in hydrogen and helium in RFX. *Journal of Nuclear Materials* 290-293 IS -, 729–732.

Last update: Tuesday 26th July, 2011

10. Carbone, V, R Cavazzana, V Antoni, L Sorriso-Valvo, E Spada, G Regnoli, P Giuliani, N Vianello, F Lepreti, R. Bruno, E Martines, and P. Veltri (2002). To what extent can dynamical models describe statistical features of turbulent flows? *Europhys Lett* 58(3), 349–355.
11. Martin, P, S Martini, V Antoni, L Apolloni, M Bagatin, W. Baker, O Barana, R Bartiromo, P Bettini, A Boboc, T Bolzonella, A Buffa, A Canton, S Cappello, L Carraro, R Cavazzana, G Chitarin, S Costa, F D'Angelo, S. D. Bello, A. D. Lorenzi, D Desideri, D. F Escande, L Fattorini, P Fiorentin, P Franz, E Gaio, L Garzotti, L Giudicotti, F Gnesotto, L Grando, S. Guo, P Innocente, A Intravaia, R Lorenzini, A Luchetta, G Malesani, G Manduchi, G Marchiori, L Marrelli, E Martines, A Maschio, A Masiello, F Milani, M Moresco, A Murari, P Nielsen, M O'Gorman, S. Ortolani, R Paccagnella, R Pasqualotto, B Pegourie, S Peruzzo, R Piovan, N Pomaro, A Ponno, G Preti, M. Puiatti, G Rostagni, F Sattin, P Scarin, G Serianni, P Sonato, E Spada, G Spizzo, M Spolaore, C Taliercio, G Telesca, D Terranova, V Toigo, L Tramontin, M Valisa, N Vianello, M Viterbo, L Zabeo, P Zaccaria, P Zanca, B Zaniol, L Zanutto, E Zilli, and G Zollino (2002). New insights into MHD dynamics of magnetically confined plasmas from experiments in RFX. *Nucl. Fusion* 42(3), 247–257.
12. Martines, E, V Antoni, R Cavazzana, G Regnoli, G Serianni, M Spolaore, N Vianello, M Hron, and J Stockel (2002). Coherent structures in the plasma edge turbulence of the RFX and CASTOR experiments. *Czechoslovak Journal Of Physics* 52, 13–24.
13. Spolaore, M, V Antoni, R Cavazzana, G Regnoli, G Serianni, E Spada, N Vianello, H Bergs aker, and J. Drake (2002). Effects of ExB velocity shear on electrostatic structures. *Phys. Plasmas* 9(10), 4110–4113.
14. Tramontin, L, L Garzotti, V Antoni, L Carraro, D Desideri, P Innocente, E Martines, G Serianni, M Spolaore, and N Vianello (2002). Particle balance during edge biasing experiments in the reversed field pinch RFX. *Plasma Physics and Controlled Fusion* 44(2), 195–204.
15. Vianello, N, M Spolaore, G Serianni, H Bergs aker, V Antoni, and J. Drake (2002). Properties of the edge plasma in the rebuilt Extrap-T2R reversed field pinch experiment. *Plasma Physics and Controlled Fusion* 44(12), 2513–2523.
16. Antoni, V, M Bagatin, G Serianni, N Vianello, M Zuin, F Paganucci, P Rossetti, and M Andrenucci (2003). Plasma Fluctuations in an Applied Field MPD Thruster. *AIP Conf. Proc.* 669(1), 302–305.
17. Antoni, V, H Bergs aker, G Serianni, M Spolaore, N Vianello, R Cavazzana, G Regnoli, E Spada, E Martines, M Bagatin, and J. Drake (2003). Anomalous particle transport and flow shear in the edge region of RFP's. *Journal of Nuclear Materials* 313-316 IS -, 972–975.
18. Antoni, V, G Regnoli, M Spolaore, G Serianni, N Vianello, R Cavazzana, E Spada, and E Martines (2003). Transport Due to Intermittent Events and Plasma Flow Shear in Magnetized Plasmas. *AIP Conf. Proc.* 669(1), 191–194.
19. Puiatti, M., S Cappello, R Lorenzini, S Martini, S. Ortolani, R Paccagnella, F Sattin, D Terranova, T Bolzonella, A Buffa, A Canton, L Carraro, D. F Escande, L Garzotti, P Innocente, L Marrelli, E Martines, P Scarin, G Spizzo, M Valisa, P Zanca, V Antoni, L Apolloni, M Bagatin, W. Baker, O Barana, D Bettella, P Bettini, R Cavazzana, M Cavinato, G Chitarin, A Cravotta, F D'Angelo, S. D. Bello, A. D. Lorenzi, D Desideri, P Fiorentin, P Franz, L Frassinetti, E Gaio, L Giudicotti, F Gnesotto, L Grando, S. Guo, A Luchetta, G Malesani, G Manduchi, G Marchiori, D Marcuzzi, P Martin, A Masiello, F Milani, M Moresco, A Murari, P Nielsen, R Pasqualotto, B Pegourie, S Peruzzo, R Piovan, P Piovesan, N Pomaro, G Preti, G Regnoli, G Rostagni, G Serianni, P Sonato, E Spada, M Spolaore, C Taliercio, G Telesca, V Toigo, N Vianello, P Zaccaria, B Zaniol, L Zanutto, E Zilli, G Zollino, and M Zuin (2003). Analysis and modelling of the magnetic and plasma profiles during PPCD experiments in RFX. *Nucl. Fusion* 43(10), 1057–1065.
20. Antoni, V, H Bergs aker, R Cavazzana, V Carbone, J Drake, E Martines, G Regnoli, G Serianni, E Spada, M Spolaore, and N Vianello (2004). Turbulence and Anomalous Transport in Magnetized Plasmas: Hints from the Reversed Field Pinch Configuration. *Contrib. Plasma Phys.* 44(56), 458–464.
21. Sattin, F, N Vianello, and M Valisa (2004). On the probability distribution function of particle density at the edge of fusion devices. *Phys. Plasmas* 11(11), 5032.
22. Spolaore, M, V Antoni, E Spada, H Bergs aker, R Cavazzana, J. Drake, E Martines, G Regnoli, G Serianni, and N Vianello (2004). Vortex-induced diffusivity in reversed field pinch plasmas. *Phys. Rev. Lett.* 93(21), 215003.
23. Antoni, V, E Spada, N Vianello, M Spolaore, R Cavazzana, G Serianni, and E Martines (2005). Shear flows generated by plasma turbulence and their influence on transport. *Plasma Physics and Controlled Fusion* 47(12B), B13–B23.
24. Regnoli, G, H Bergs aker, E Tennfors, F. Zonca, E Martines, G Serianni, M Spolaore, N Vianello, M Cecconello, V Antoni, R Cavazzana, and J.-A Malmberg (2005). Observations of toroidicity-induced Alfv en eigenmodes in a reversed field pinch plasma. *Phys. Plasmas* 12(4), 042502.
25. Sattin, F and N Vianello (2005). Statistical model for intermittent plasma edge turbulence. *Phys. Rev. E* 72(1), 5.
26. Sattin, F, N Vianello, M Valisa, V Antoni, and G Serianni (2005). On the probability distribution function of particle density and flux at the edge of fusion devices. *J. Phys.: Conf. Ser.* 7, 247–252.

27. Spolaore, M, V Antoni, E Spada, H Bergs aker, R Cavazzana, J. R. Drake, E Martines, G Regnoli, G Serianni, and N Vianello (2005). Coherent structure diffusivity in the edge region of Reversed Field Pinch experiments. *J. Phys.: Conf. Ser.* 7, 253–258.
28. Vianello, N, V Antoni, E Spada, M Spolaore, G Serianni, R Cavazzana, H Bergs aker, M Cecconello, and J. Drake (2005). Reynolds and Maxwell stress measurements in the reversed field pinch experiment Extrap-T2R. *Nucl. Fusion* 45(8), 761–766.
29. Vianello, N, E Spada, V Antoni, M Spolaore, G Serianni, G Regnoli, R Cavazzana, H Bergs aker, and J. R Drake (2005). Self-Regulation of $E \times B$ Flow Shear via Plasma Turbulence. *Phys. Rev. Lett.* 94(13), 135001.
30. Antoni, V, J. Drake, E Spada, M Spolaore, N Vianello, H Bergs aker, R Cavazzana, M Cecconello, E Martines, and G Serianni (2006). Coherent structures and anomalous transport in reversed field pinch plasmas. *Phys. Scr.* T122, 1–7.
31. Paccagnella, R, S. Ortolani, P Zanca, A. Alfier, T Bolzonella, L Marrelli, M. E Puiatti, G Serianni, D Terranova, M Valisa, M Agostini, L Apolloni, F Auriemma, F Bonomo, A Canton, L Carraro, R Cavazzana, M Cavinato, P Franz, E Gazza, L Grando, P Innocente, R Lorenzini, A Luchetta, G Manduchi, G Marchiori, S Martini, R Pasqualotto, P Piovesan, N Pomaro, P Scarin, G Spizzo, M Spolaore, C Taliercio, N Vianello, B Zaniol, L Zanotto, and M Zuin (2006). Active-Feedback Control of the Magnetic Boundary for Magnetohydrodynamic Stabilization of a Fusion Plasma. *Phys. Rev. Lett.* 97(7), 4.
32. Sattin, F, P Scarin, M Agostini, R Cavazzana, G Serianni, M Spolaore, and N Vianello (2006). Statistical features of edge turbulence in RFX-mod from gas puffing imaging. *Plasma Physics and Controlled Fusion* 48(7), 1033–1051.
33. Vianello, N, V Antoni, E Spada, M Spolaore, G Serianni, R Cavazzana, H Bergs aker, M Cecconello, and J. R. Drake (2006). Turbulence, flow and transport: hints from reversed field pinch. *Plasma Physics and Controlled Fusion* 48(4), S193–S203.
34. Cavazzana, R, G Serianni, P Scarin, M Agostini, N Vianello, Y Yagi, H Koguchi, S Kiyama, H Sakakita, and Y Hirano (2007). Investigation of plasma edge turbulence using a gas-puff imaging system in the reversed-field pinch device TPE-RX. *Plasma Physics and Controlled Fusion* 49(2), 129–143.
35. Marrelli, L, P Zanca, M Valisa, G Marchiori, A. Alfier, F Bonomo, M Gobbin, P Piovesan, D Terranova, M Agostini, C Alessi, V Antoni, L Apolloni, F Auriemma, O Barana, P Bettini, T Bolzonella, D Bonfiglio, M Brombin, A Buffa, A Canton, S Cappello, L Carraro, R Cavazzana, M Cavinato, G Chitarin, S. D. Bello, A. D. Lorenzi, D. F Escande, A Fassina, P Franz, G Gadani, E Gaio, E Gazza, L Giudicotti, F Gnesotto, L Grando, S Guo, P Innocente, R Lorenzini, A Luchetta, G Malesani, G Manduchi, D Marcuzzi, P Martin, S Martini, E Martines, A Masiello, F Milani, M Moresco, A Murari, L Novello, S. Ortolani, R Paccagnella, R Pasqualotto, S Peruzzo, R Piovan, A Pizzimenti, N Pomaro, I Predebon, M Puiatti, G Rostagni, F Sattin, P Scarin, G Serianni, P Sonato, E Spada, A Soppelsa, G Spizzo, M Spolaore, C Taccon, C Taliercio, V Toigo, N Vianello, P Zaccaria, B Zaniol, L Zanotto, E Zilli, G Zollino, and M Zuin (2007). Magnetic self organization, MHD active control and confinement in RFX-mod. *Plasma Physics and Controlled Fusion* 49(12B), B359–B369.
36. Martini, S, M Agostini, C Alessi, A. Alfier, V Antoni, L Apolloni, F Auriemma, P Bettini, T Bolzonella, D Bonfiglio, F Bonomo, M Brombin, A Buffa, A Canton, S Cappello, L Carraro, R Cavazzana, M Cavinato, G Chitarin, A Cravotta, S. D. Bello, A. D. Lorenzi, L. D. Pasqual, D. F Escande, A Fassina, P Franz, G Gadani, E Gaio, L Garzotti, E Gazza, L Giudicotti, F Gnesotto, M Gobbin, L Grando, S. Guo, P Innocente, R Lorenzini, A Luchetta, G Malesani, G Manduchi, G Marchiori, D Marcuzzi, L Marrelli, P Martin, E Martines, A Masiello, F Milani, M Moresco, A Murari, L Novello, S. Ortolani, R Paccagnella, R Pasqualotto, S Peruzzo, R Piovan, P Piovesan, A Pizzimenti, N Pomaro, M. Puiatti, G Rostagni, F Sattin, P Scarin, G Serianni, P Sonato, E Spada, A Soppelsa, G Spizzo, M Spolaore, C Taccon, C Taliercio, D Terranova, V Toigo, M Valisa, N Vianello, P Zaccaria, P Zanca, B Zaniol, L Zanotto, E Zilli, G Zollino, and M Zuin (2007). Active MHD control at high currents in RFX-mod. *Nucl. Fusion* 47(8), 783–791.
37. Scarin, P, M Agostini, R Cavazzana, F Sattin, G Serianni, and N Vianello (2007). Edge turbulence in RFX-mod virtual-shell discharges. *Journal of Nuclear Materials* 363–365, 669.
38. Serianni, G, M Agostini, V Antoni, R Cavazzana, E Martines, F Sattin, P Scarin, E Spada, M Spolaore, N Vianello, and M Zuin (2007). Coherent structures and transport properties in magnetized plasmas. *Plasma Physics and Controlled Fusion* 49(12B), B267–B280.
39. Valisa, M, T Bolzonella, P Buratti, L Carraro, R Cavazzana, S. D. Bello, P Martin, R Pasqualotto, J Sarff, M Spolaore, P Zanca, L Zanotto, M Agostini, A. Alfier, V Antoni, L Apolloni, F Auriemma, O Barana, M Baruzzo, P Bettini, D Bonfiglio, F Bonomo, M Brombin, A Buffa, A Canton, S Cappello, M Cavinato, G Chitarin, A. D. Lorenzi, G. D. Masi, D. F Escande, A Fassina, P Franz, E Gaio, E Gazza, L Giudicotti, F Gnesotto, M Gobbin, L Grando, L Guazzotto, S Guo, V Igochine, P Innocente, R Lorenzini, A Luchetta, G Manduchi, G Marchiori, D Marcuzzi, L Marrelli, S Martini, E Martines, K Mccollam, F Milani, M Moresco, L Novello, S. Ortolani, R Paccagnella, S Peruzzo, R Piovan, L Piron, A Pizzimenti, P Piovesan, N Pomaro, I Predebon, M Puiatti, G Rostagni, F Sattin, P Scarin, G Serianni, P Sonato, E Spada, A Soppelsa, S Spagnolo, G Spizzo, C Taliercio, D Terranova, V Toigo, N Vianello, D Yadikin, P Zaccaria, B Zaniol, E Zilli, and M Zuin (2008). High current regimes in RFX-mod. *Plasma Physics and Controlled Fusion* 50, 124031.

40. Agostini, M, P Scarin, R Cavazzana, F Sattin, G Serianni, M Spolaore, and N Vianello (2009). Edge turbulence characterization in RFX-mod with optical diagnostics. *Plasma Physics and Controlled Fusion* **51**, 105003.
41. Brotankova, J, J Adamek, E Martines, J Stockel, M Spolaore, R Cavazzana, G Serianni, N Vianello, and M Zuin (2009). Measurements of plasma potential and electron temperature by ball-pen probes in RFX-Mod. *Probl. At. Sci. Tech.* (1), 16–18.
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