

National and international journals

- R.1. Beam energy recovery for fusion and collector design for tests on compact sources**
V. Variale, V. Valentino, M. Cavenago, C. Baltador, E. Sartori, and G. Serianni
Rev. Sci. Instrum. **91**, 013516 (2020); <https://doi.org/10.1063/1.5128668>
- R.2. Edge turbulence approaching the density limit in RFX-mod experiment**
M. Agostini, P. Scarin
Plasma Phys. Control. Fusion **62** (2020) 025009; <https://doi.org/10.1088/1361-6587/ab53b6>
- R.3. Beamlet scraping and its influence on the beam divergence at the BATMAN Upgrade test facility**
Wimmer, F. Bonomo, A. Hurlbatt, L. Schiesko, U. Fantz, N. den Harder, B. Heinemann, A. Mimo, G. Orozco, M. Agostini, M. Barbisan, M. Brombin, R. Delogu, A. Pimazzoni, C. Poggi, G. Serianni, M. Ugoletti, and P. Veltri
Rev. Sci. Instrum. **91**, 013509 (2020); <https://doi.org/10.1063/1.5129336>
- R.4. Erratum: An inverse equilibrium tool to define axisymmetric plasma equilibria**
(*Plasma Physics and Controlled Fusion* (2019) 61 (105016) DOI: 10.1088/1361-6587/ab3f09)(Erratum)
D. Abate, P. Bettini
Plasma Phys. Control. Fusion **62**, Issue 2, (2020) 029501; <https://doi.org/10.1088/1361-6587/ab5b66>
- R.5. Interpreting the dynamic equilibrium during evaporation in a cesium environment**
M. Fadone, M. Barbisan, S. Cristofaro, M. De Muri, G. Serianni, and E. Sartori
Rev. Sci. Instrum. **91**, 013332 (2020); <https://doi.org/10.1063/1.5129666>
- R.6. First measurements of optical emission spectroscopy on SPIDER negative ion source**
Barbara Zaniol, Marco Barbisan, Domenico Bruno, Roberto Pasqualotto, Cesare Taliercio, and Margherita Ugoletti
Rev. Sci. Instrum. **91**, 013103 (2020); <https://doi.org/10.1063/1.5128900>
- R.7. Fault analysis and improved design of JET in-vessel Mirnov coils**
M. Baruzzo, G. Artaserse, R. B. Henriques, S. Gerasimov, N. Lamd, P. J. Lomas, R. Otind, F. Rimini, M. Tsalas, S. Van Boxel, JET Contributors
Fus Eng and Design **150** (2020) 111419; <https://doi.org/10.1016/j.fusengdes.2019.02.123>
- R.8. PEEC Modeling of Planar Spiral Resonators**
Dimitri Voltolina, Riccardo Torchio, Paolo Bettini, Roberto Cavazzana, and Maurizio Moresco
IEEE Trans on Mag. **56**, 1 (2020) 6700404; <https://doi.org/10.1109/TMAG.2019.2949481>
- R.9. Simulation of the gas density distribution in the accelerator of the ELISE test facility**
M. Siragusa, E. Sartori, F. Bonomo, B. Heinemann, G. Orozco, and G. Serianni
Rev. Sci. Instrum. **91**, 013511 (2020); <https://doi.org/10.1063/1.5129221>
- R.10. Design and development of an Allison type emittance scanner for the SPIDER ion source**
Carlo Poggi, Emanuele Sartori, Marco Tollin, Matteo Brombin, Matteo Zaupa, Enrico Fagotti and Gianluigi Serianni
Rev. Sci. Instrum. **91**, 013328 (2020); <https://doi.org/10.1063/1.5129650>

- R.11. Interaction of cold atmospheric plasmas with cell membranes in plasma medicine studies**
E. Martines
Jpn. J. Appl. Phys. **59** (2020) SA0803; <https://doi.org/10.7567/1347-4065/ab4860>
- R.12. Testing the consistency of multimachine databases for physical studies of regression**
A. Murari, M. Lungaroni and M. Gelfusa
Nucl. Fusion **60** 015001; <https://doi.org/10.1088/1741-4326/ab4285>
- R.13. Helically self-organized pinches: dynamical regimes and magnetic chaos healing**
Marco Veranda, Daniele Bonfiglio, Susanna Cappello, Giovanni di Giannatale and Dominique Frank Escande
Nucl. Fusion **60** (2020) 016007; <https://doi.org/10.1088/1741-4326/ab4863>
- R.14. Experimental and numerical investigation on the asymmetry of the current density extracted through a plasma meniscus in negative ion accelerator**
S Denizeau, D Aprile, G Fubiani, F Taccogna, P Minelli, M Ichikawa, J Hiratsuka, M Kashiwagi, A Kojima and G Chitarin
Plasma Sources Sci. Technol. **29** (2020) 075012; <https://doi.org/10.1088/1361-6595/ab9cc2>
- R.15. Beam and installation improvements of the NIO1 ion source**
M. Cavenago, M. Barbisan, R. Delogu, A. Pimazzoni, C. Poggi, M. Ugoletti, M. Agostini, V. Antoni, C. Baltador, V. Cervaro, M. De Muri, D. Giora, P. Jain, B. Laterza, G. Maero, M. Maniero, D. Martini, A. Minarello, D. Ravarotto, D. Recchia, A. Rizzolo, M. Romé, E. Sartori, M. Sattin, G. Serianni, F. Taccogna, V. Valentino, V. Variale, and P. Veltri
Rev. Sci. Instrum. **91**, 013316 (2020); <https://doi.org/10.1063/1.5129666>
- R.16. Study of ion cyclotron heating scenarios and fast particles generation in the divertor tokamak test facility**
A Cardinali, T Bolzonella, C Castaldo, S Ceccuzzi, G Granucci, G L Ravera, A A Tuccillo, M Vallar and P Vincenzi
Plasma Phys. Control. Fusion **62** (2020) 044001 <https://doi.org/10.1088/1361-6587/ab73da>
- R.17. Negative ion characterization in a helicon plasma source for fusion neutral beams by cavity ring-down spectroscopy and Langmuir probe laser photodetachment**
R. Agnello, S. Béchu, I. Furno, Ph. Guittienne, A.A. Howling, R. Jacquier, G. Plyushchev, M. Barbisan, R. Pasqualotto, I. Morgal and A. Simonin
Nucl. Fusion **60** (2020) 026007; <https://doi.org/10.1088/1741-4326/ab5e64>
Abstract:
- R.18. The impact of edge radial electric fields on edge–scrape-off layer coupling in the TJ-II stellarator**
G. Grenfell, B.Ph. van Milligen, U. Losada, T. Estrada, B. Liu, C. Silva, M. Spolaore, C. Hidalgo and the TJ-II Team
Nucl. Fusion **60** (2020) 014001; <https://doi.org/10.1088/1741-4326/ab538c>
- R.19. A linear equation based on signal increments to predict disruptive behaviours and the time to disruption on JET**
J. Vega, A. Murari, S. Dormido-Canto, F. Hernández, T. Cruz, D. Gadariya, G.A. Rattá and JET Contributors
Nucl. Fusion **60** (2020) 026001; <https://doi.org/10.1088/1741-4326/ab5880>
- R.20. Identity of the JET M-mode and the ASDEX Upgrade I-phase phenomena**
D.I. Réfy, E.R. Solano, N. Vianello, S. Zoletnik, D. Dunai, B. Tál, M. Brix, R. Gomes, G. Birkenmeier, E. Wolfrum, F. Laggner, M. Griener, O. Asztalos, E. Delabie, ASDEX Upgrade

team, JET Contributors and EUROfusion MST

Nucl. Fusion **60** (2020) 056004; <https://doi.org/10.1088/1741-4326/ab7594>

R.21. Advance in the conceptual design of the European DEMO magnet system

K Sedlak, V A Anvar, N Bagrets, M E Biancolini, R Bonifetto, F Bonne, D Boso, A Brighenti, P Bruzzone, G Celentano, A Chiappa, V D'Auria, M Dan, P Decool, A della Corte, A Dembkowska, O Dicuonzo, I Duran, M Eisterer, A Ferro, C Fiamozzi Zignani, W H Fietz, C Frittitta, E Gaio, L Giannini, F Giorgetti, F Gömöry, X Granados, R Guarino, R Heller, C Hoa, I Ivashov, G Jiolat, M Jirsa, B Jose, R Kembleton, M Kumar, B Lacroix, Q Le Coz, M Lewandowska, A Maistrello, N Misiara, L Morici, L Muzzi, S Nicollet, A Nijhuis, F Nunio, C Portafaix, G Romanelli, X Sarasola, L Savoldi, B Stepanov, I Tiseanu, G Tomassetti, A Torre, S Turtù, D Uglietti, R Vallcorba, L Viererbl, M Vojenciak, C Vorpahl, K-P Weiss, R Wesche, M J Wolf, L Zani, R Zanino, A Zappatore and V Corato

Supercond. Sci. Technol. **33** (2020) 044013; <https://doi.org/10.1088/1361-6668/ab75a9>

R.22. Advances in the physics studies for the JT-60SA tokamak exploitation and research plan

G Giruzzi, M Yoshida, N Aiba, J F Artaud, J Ayllon-Guerola, O Beeke, A Bierwage, T Bolzonella, M Bonotto, C Boulbe, M Chernyshova, S Coda, R Coelho, D Corona, N Cruz, S Davis, C Day, G De Tommasi, M Dibon, D Douai, D Farina, A Fassina, B Faugeras, L Figini, M Fukumoto, S Futatani, K Galazka, J Garcia, M Garcia-Muñoz, L Garzotti, L Giudicotti, N Hayashi, M Honda, K Hoshino, A Iantchenko, S Ide, S Inoue, A Isayama, E Joffrin, Y Kamada, K Kamiya, M Kashiwagi, H Kawashima, T Kobayashi, A Kojima, T Kurki-Suonio, P Lang, Ph Lauber, E de la Luna, G Marchiori, G Matsunaga, A Matsuyama, M Mattei, S Mazzi, A Mele, Y Miyata, S Moriyama, J Morales, A Moro, T Nakano, R Neu, S Nowak, FP Orsitto, V Ostuni, N Oyama, S Paméla, R Pasqualotto, B Pégourié, E Perelli, L Pigatto, C Piron, A Pironti, P Platania, B Ploekl, D Ricci, M Romanelli, G Rubino, S Sakurai, K Särkimäki, M Scannapiego, K Shinohara, J Shiraishi, S Soare, C Sozzi, T Suzuki, Y Suzuki, T Szepesi, M Takechi, K Tanaka, H Tojo, M Turnyanskiy, H Urano, M Valisa, M Vallar, J Varje, J Vega, F Villone, T Wakatsuki, T Wauters, M Wischmeier, S Yamoto and R Zagórski

Plasma Phys. Control. Fusion **62** (2020) 014009; <https://doi.org/10.1088/1361-6587/ab4771>

R.23. On the Potential of Time Delay Neural Networks to Detect Indirect Coupling between Time Series

Riccardo Rossi, Andrea Murari and Pasquale Gaudio

Entropy **2020**, 22(5), 584; <https://doi.org/10.3390/e22050584>

R.24. Scrape-off layer transport and filament characteristics in high-density tokamak regimes

N. Vianello, D. Carralero, C.K. Tsui, V. Naulin, M. Agostini, I. Cziegler, B. Labit, C. Theiler, E. Wolfrum, D. Aguiam, S. Allan, M. Bernert, J. Boedo, S. Costea, H. De Oliveira, O. Fevrier, J. Galdon-Quiroga, G. Grenfell, A. Hakola, C. Ionita, H. Isliker, A. Karpushov, J. Kovacic, B. Lipschultz, R. Maurizio, K. McClements, F. Militello, A.H. Nielsen, J. Olsen, J.J. Rasmussen, T. Ravensbergen, H. Reimerdes, B. Schneider, R. Schrittwieser, E. Seliunin, M. Spolaore, K. Verhaegh, J. Vicente, N. Walkden, W. Zhang, the ASDEX Upgrade Team, the TCV Team and the EUROfusion MST1 Team

Nucl. Fusion **60** (2020) 016001; <https://doi.org/10.1088/1741-4326/ab423e>

R.25. Conceptual design of JT-60SA edge Thomson scattering diagnostic

R. Pasqualotto, H. Tojo, A. Fassina, L. Giudicotti, V. Nardino, N. Oyama, S. Pelli, V. Raimondi, S. Ricciarini, S. Soare, S. Davis and C. Sozzi

JINST **15** (2020) C01011; <https://doi.org/10.1088/1748-0221/15/01/C01011>

- R.26. Design of Thomson scattering diagnostics for the Divertor Tokamak Test (DTT) facility**
L. Giudicotti, A. Fassina, R. Pasqualotto and P. Franz
JINST **15** (2020) C01042; <https://doi.org/10.1088/1748-0221/15/01/C01042>
- R.27. First operation in SPIDER and the path to complete MITICA**
G. Serianni, V. Toigo, M. Bigi, M. Boldrin, G. Chitarin, S. Dal Bello, L. Grandò, A. Luchetta, D. Marcuzzi, R. Pasqualotto, N. Pomaro, P. Zaccaria, L. Zanotto, P. Agostinetti, M. Agostini, V. Antoni, D. Aprile, M. Barbisan, M. Battistella, M. Brombin, A. Canton, R. Cavazzana, M. Dalla Palma, M. Dan, R. Delogu, A. De Lorenzi, M. De Muri, S. Denizeau, M. Fadone, F. Fellin, A. Ferro, E. Gaio, G. Gambetta, F. Gasparini, F. Gnesotto, P. Jain, A. Maistrello, G. Manduchi, S. Manfrin, G. Marchiori, N. Marconato, M. Moresco, T. Patton, M. Pavei, S. Peruzzo, N. Pilan, A. Pimazzoni, R. Piovan, C. Poggi, M. Recchia, A. Rigoni, A. Rizzolo, G. Rostagni, E. Sartori, M. Siragusa, P. Sonato, E. Spada, S. Spagnolo, M. Spolaore, C. Taliercio, P. Tinti, M. Ugoletti, M. Valente, A. Zamengo, B. Zaniol, M. Zaupa, M. Cavenago, D. Boilson, C. Rotti, P. Veltri, J. Chareyre, H. Decamps, M. Dremel, J. Graceffa, F. Geli, B. Schunke, L. Svensson, M. Urbani, T. Bonicelli, G. Agarici, A. Garbuglia, A. Masiello, F. Paolucci, M. Simon, L. Bailly-Maitre, E. Bragulat, G. Gomez, D. Gutierrez, C. Labate, G. Mico, J. F. Moreno, V. Pilard, G. Kouzmenko, A. Rousseau, A. Chakraborty, U. Baruah, H. Patel, N. P. Singh, A. Patel, H. Dhola, B. Raval, S. Cristofaro, U. Fantz, B. Heinemann, W. Kraus, M. Kashiwagi, and H. Tobarì
Rev. Sci. Instrum. **91**, 023510 (2020); <https://doi.org/10.1063/1.5133076>
- R.28. Design of an interferometer/polarimeter for DTT**
D. Fiorucci, P. Innocente, D. Terranova, C. Mazzotta and O. Tudisco
JINST **15** (2020) C02041; <https://doi.org/10.1088/1748-0221/15/02/C02041>
- R.29. Quantifying Total Influence between Variables with Information Theoretic and Machine Learning Techniques**
Andrea Murari, Riccardo Rossi, Michele Lungaroni, Pasquale Gaudio and Michela Gelfusa
Entropy **2020**, **22**, 141; [doi:10.3390/e22020141](https://doi.org/10.3390/e22020141)
- R.30. Numerical simulation of experimental tests performed on ZAO® non-evaporable-getter pump designed for neutral beam injector applications**
M. Siragusa, E. Sartori, M. Mura, and F. Siviero
Rev. Sci. Instrum. **91**, 023501 (2020); <https://doi.org/10.1063/1.5128662>
- R.31. Analysis of current–voltage characteristics for Langmuir probes immersed in an ion beam**
E. Sartori, V. Candeloro, and G. Serianni
Rev Sci Instrum **91**, 023504 (2020); <https://doi.org/10.1063/1.5128669>
- R.32. Special Issue “Plasma Technology for Biomedical Applications**
Emilio Martines
Appl. Sci. **2020**, **10**, 1524; [doi:10.3390/app10041524](https://doi.org/10.3390/app10041524)
- R.33. Reduction of asymmetric wall force in JET and ITER disruptions including runaway electrons**
H. Strauss, E. Joffrin, V. Riccardo, J. Breslau, R. Paccagnella, G. Y. Fu, and JET Contributors
Phys. Plasmas **27**, 022508 (2020); <https://doi.org/10.1063/1.5129134>
- R.34. Simulation and measurement of rarefied gas flow and neutral density profiles through a large multi aperture multigrid negative ion accelerator**
E. Sartori, M. Fincato, M. Siragusa, A. Pimazzoni, L. Grandò, M. Tollin, G. Serianni
Fus. Eng. and Design **151** (2020) 111398; <https://doi.org/10.1016/j.fusengdes.2019.111398>

- R.35. Expanded capabilities of the CarMa code in modeling resistive wallmode dynamics with 3-D conductors**
M Bonotto, Y Q Liu, F Villone, L Pigatto and P Bettini
Plasma Phys. Control. Fusion **62** (2020) 045016; <https://doi.org/10.1088/1361-6587/ab74e7>
- R.36. High resolution mass separator dipole design studies for SPES project**
C Baltador, M Comunian, L Bellan, M Cavenago, A De Lorenzi, A Galatà, L Ferrari, F Mosio and A Pisent
J. Phys.: Conf. Ser. **1401** (2020) 012014; [doi:10.1088/1742-6596/1401/1/012014](https://doi.org/10.1088/1742-6596/1401/1/012014)
- R.37. Dispersion scanning beam medium infra-red interferometry for divertor plasma density measurement in DTT**
L. Balbinot, P. Innocente, D. Fiorucci, C. Mazzotta and O. Tudisco
JINST **15** (2020) C02028; <https://doi.org/10.1088/1748-0221/15/02/C02028>
- R.38. Performance analysis and application study of a laser enhancement cavity for photo-neutralization of Negative Ion Beams**
A. Fassina, D. Fiorucci, L. Giudicotti, and P. Vincenzi
JINST **15** (2020) C02031; <https://doi.org/10.1088/1748-0221/15/02/C02031>
- R.39. Matrix-Based Rational Interpolation for New Coupling Scheme Between MHD and Eddy-Current Numerical Models**
Matteo Bonotto, Fabio Villone, Yueqiang Liu, and Paolo Bettini
IEEE Trans. Magn., **56** Issue: 3, 7511804 (2020); DOI: 10.1109/TMAG.2019.2954648
- R.40. CRISP: A compact RF ion source prototype for emittance scanner testing**
Poggi, E. Sartori, M. Zuin, M. Brombin, V. Cervaro, M. Fadone, A. Fassina, M. Fincato, B. Segalini, and G. Serianni
Rev. Sci. Instrum. **91**, 033314 (2020); <https://doi.org/10.1063/1.5129641>
- R.41. Assessment of the SPIDER beam features by diagnostic calorimetry and thermography**
Antonio Pimazzoni, Matteo Brombin, Gloria Canocchi, Rita S. Delogu, Daniele Fasolo, Luca Franchin, Bruno Laterza, Roberto Pasqualotto, Gianluigi Serianni, and Marco Tollin
Rev. Sci. Instrum. **91**, 033301 (2020); <https://doi.org/10.1063/1.5128562>
- R.42. Wound healing improvement in large animals using an indirect helium plasma treatment**
Emilio Martines, Paola Brun, Roberto Cavazzana, Luigi Cordaro, Matteo Zuin, Tiziana Martinello, Chiara Gomiero, Anna Perazzi, Luca Melotti, Lisa Maccatrozzo, Marco Patruno, Ilaria Iacopetti
CLINICAL PLASMA MEDICINE **17-18** N. UNSP 100095 (2020); <https://doi.org/10.1016/j.cpme.2020.100095>
- R.43. Investigating the thermal stability of highly radiative discharges on JET with a new tomographic method**
A. Murari E. Peluso, T. Craciunescu, C. Lowry, S. Aleiferis, P. Carvalho, M. Gelfusa and JET Contributors
Nucl. Fusion **60** (2020) 046030; <https://doi.org/10.1088/1741-4326/ab7536>
- R.44. Upgrading Model Selection Criteria with Goodness of Fit Tests for Practical Applications**
Riccardo Rossi, Andrea Murari, Pasquale Gaudio and Michela Gelfusa
Entropy **2020**, **22**, 447; [doi:10.3390/e22040447](https://doi.org/10.3390/e22040447)

- R.45. The phenomenology of reconnection events in the reversed field pinch**
B. Momo, H. Isliker, R. Cavazzana, M. Zuin, L. Cordaro, D. Lopez-Bruna, E. Martines, I. Predebon, C. Rea, M. Spolaore, L. Vlahos and P. Zanca
Nucl. Fusion **60** (2020) 056023; <https://doi.org/10.1088/1741-4326/ab7d4e>
- R.46. Use of a new cold plasma tool for psoriasis treatment: A case report**
Clarice Gareri, Luigi Bennardo and Gianluca De Masi
SAGE OPEN MEDICAL CASE REPORTS **8** N. 2050313X20922709 (2020); DOI: [10.1177/2050313X20922709](https://doi.org/10.1177/2050313X20922709)
- R.47. On the transfer of adaptive predictors between different devices for both mitigation and prevention of disruptions**
A. Murari, R. Rossi, E. Peluso, M. Lungaroni, P. Gaudio, M. Gelfusa, G. Ratta, J. Vega and JET Contributors and ASDEX Upgrade Team
Nucl. Fusion **60** 056003; <https://doi.org/10.1088/1741-4326/ab77a6>
- R.48. Accurate Magnetic Sensor System Integrated Design**
Nicolò Marconato, Roberto Cavazzana, Paolo Bettini and Andrea Rigoni
Sensors **2020**, **20**, 2929; [doi:10.3390/s20102929](https://doi.org/10.3390/s20102929)
- R.49. Design of a System for Performing High-Voltage Holding Test Campaigns on a Mockup of MITICA Negative Ion Source**
D. Aprile, T. Patton, N. Pilan, G. Chitarin
IEEE Trans. Plasma Sci., **48**, 6, (2020) 1155; <https://doi.org/10.1109/TPS.2020.2966911>
- R.50. Mapping of Magnetic Field of SPIDER by a Three-Axis Automatic Positioning System**
Daniele Aprile, Piero Agostinetti, Sylvestre Denizeau, and Giuseppe Chitarin
IEEE Trans. Plasma Sci., **48**, 6, (2020) 1566; <https://doi.org/10.1109/TPS.2019.2955063>
- R.51. Manufacturing, Installation, and Commissioning of the Residual Ion Dump Power Supply for MITICA Experiment**
Alberto Ferro, Loris Zanotto, Vanni Toigo, Luigi Rinaldi, Saverino Carrozza, Sandro Lazzari, Luca Sita, Alessandro Morato, Giuseppe Taddia, Daniel Gutierrez, Andrea Garbuglia, and Hans Decamps
IEEE Trans. Plasma Sci., **48**, 6, (2020) 1572; <https://doi.org/10.1109/TPS.2020.2965315>
- R.52. Tests Design and Models Validation for the Acceleration Grid Power Supply Conversion System of the MITICA Test Facility**
Mattia Dan, Loris Zanotto, Claudio Finotti, Mauro Perna, Hans Decamps, and Daniel Gutierrez
IEEE Trans. Plasma Sci., **48**, 6, (2020) 1681; <https://doi.org/10.1109/TPS.2019.2961168>
- R.53. Status and Perspectives of a Reversed Field Pinch as a Pilot Neutron Source**
Roberto Piovan, Piero Agostinetti, Chiara Bustreo, Roberto Cavazzana, Dominique Escande, Elena Gaio, Francesco Lunardon, Alberto Maistrello, Maria Ester Puiatti, Marco Valisa, Giuseppe Zollino, and Matteo Zuin
IEEE Trans. Plasma Sci., **48**, 6, (2020) 1708; <https://doi.org/10.1109/TPS.2019.2957888>
- R.54. DTT's Role, Characteristics & Design Status**
Polli, G.M., Albanese, R., Crisanti, F., Martin, P., Pizzuto, A., Ambrosino, R., Cucchiaro, A., Di Gironimo, G., Di Zenobio, A., Granucci, G., Innocente, P., Lampasi, A., Martone, R., Ramogida, G., Roccella, S., Rydzy, A., Sandri, S., Valisa, M., Villari, R.
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- R.55. Preliminary Thermo-Mechanical Design of the Once Through Steam Generator and Molten Salt Intermediate Heat Exchanger for EU DEMO**
M. Zaupa, M. Dalla Palma, A. Del Nevo, I. Moscato, A. Tarallo, and L. Barucca
IEEE Trans. Plasma Sci., **48**, 6, (2020) 1726; <https://doi.org/10.1109/TPS.2020.2972058>
- R.56. The Heating Current Drive System of Divertor Tokamak Test (DTT)**
Granucci, G., Ravera, G., Bruschi, A., Ceccuzzi, S., Agostinetti, P., Garavaglia, S., Romano, A., Ferro, A.
20th IEEE Mediterranean Electrotechnical Conference, MELECON 2020 – Proceedings June 2020, 9140677, 629-633; [DOI: 10.1109/MELECON48756.2020.9140576](https://doi.org/10.1109/MELECON48756.2020.9140576)
- R.57. An insight on beryllium dust sources in the JET ITER-like wall based on numerical simulations**
Andrea Uccello, Gabriele Gervasini, Francesco Ghezzi, Enzo Lazzaro, D Borodin, I Borodkina, D Douai, A Huber, I Jepu, D Terranova, A Widdowson and JET Contributors
Plasma Phys. Control. Fusion **62** (2020) 064001; <https://doi.org/10.1088/1361-6587/ab8610>
- R.58. Overview of disruptions with JET-ILW**
S.N. Gerasimov, P. Abreu, G. Artaserse, M. Baruzzo, P. Buratti, I.S. Carvalho, I.H. Coffey, E. De La Luna, T.C. Hender, R.B. Henriques, R. Felton, S. Jachmich, U. Kruezi, P.J. Lomas, P. McCullen, M. Maslov, E. Matveeva, S. Moradi, L. Piron, F.G. Rimini, W. Schippers, C. Stuart, G. Szepesi, M. Tsalias, D. Valcarcel, L.E. Zakharov and JET Contributors
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- R.59. Assessment of alternative divertor configurations as an exhaust solution for DEMO**
H. Reimerdes, R. Ambrosino, P. Innocente, A. Castaldo, P. Chmielewski, G. Di Gironimo, S. Merriman, V. Pericoli-Ridolfini, L. Aho-Mantilla, R. Albanese, H. Bufferand, G. Calabro, G. Ciraolo, D. Coster, N. Fedorczak, S. Ha, R. Kembleton¹, K. Lackner, V.P. Loschiavo, T. Lunt, D. Marzullo, R. Maurizio, F. Militello, G. Ramogida, F. Subba, S. Varoutis, R. Zagórski and H. Zohm
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- R.60. The EU DEMO Plant Electrical System: Issues and perspective**
E. Gaio, A.Ferro, A.Maistrello, M.Dan, F.Lunardon L.Barucca, S.Ciattaglia, G.Federici, I.Benfatto
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- R.61. Study of high DC voltage breakdown between stainless steel electrodes separated by long vacuum gaps**
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- R.62. Image-Based Methods to Investigate Synchronization between Time Series Relevant for Plasma Fusion Diagnostics**
Teddy Craciunescu, Andrea Murari, Ernesto Lerche, Michela Gelfusa, and JET Contributors
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- R.63. Simulation-Based Quantification of Alkali-Metal Evaporation Rate and Systematic Errors From Current-Voltage Characteristics of Langmuir-Taylor Detectors**
E. Sartori
IEEE Trans. Instrum. Meas., **69**, NO. 7, (2020); [DOI: 10.1109/TIM.2019.2955773](https://doi.org/10.1109/TIM.2019.2955773)
- R.64. Analysis of the Effects of Electrification of the Road Transport Sector on the Possible Penetration of Nuclear Fusion in the Long-Term European Energy Mix**
Daniele Lerede, Chiara Bustreo, Francesco Gracceu, Yolanda Lechón and Laura Savoldi
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- R.65. Modelling of RFX-mod2 tokamak equilibria with DEMO-like shape conditions and negative triangularity**
D Abate, G Marchiori, P Bettini and F Villone
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Francesco Lunardon, Alberto Maistrello, Iacopo Spresian, Elena Gaio, Roberto Piovan, Sergio Ciattaglia
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- R.68. Resonance overlap and nonlinear features of the beam-plasma system**
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- R.69. A refinement of recurrence analysis to determine the time delay of causality in presence of external perturbations**
E. Peluso, T. Craciunescu, A. Murari
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- R.71. Empirical scaling of the $n = 2$ error field penetration threshold in tokamaks**
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- R.72. On the oxidation mechanism of U3Si2 accident tolerant nuclear fuel**
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- R.73. Investigating the Physics of Tokamak Global Stability with Interpretable Machine Learning Tools**

A. Murari, E. Peluso, M. Lungaroni, R. Rossi, M. Gelfusa and JET Contributors
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D.B. King, E. Viezzer, I. Balboa, M. Baruzzo, E. Belonohy, J. Buchanan, I.S. Carvalho, K. Cave-Ayland, C.D. Challis, I. Coffey, E.G. Delabie, L. Garzotti, S. Hall, J.C. Hillesheim, L. Horvath, E. Joffrin, D. Keeling, K. Kirov, C.F. Maggi, M. Maslov, S. Saarelma, S. Silburn, E.R. Solano, D. Valcarcel, H. Weisen and JET contributors
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M. V. Falessi, N. Carlevaro, V. Fusco, E. Giovannozzi, P. Lauber, G. Vlad, F. Zonca
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H. Weisen, C.F. Maggi, M. Oberparleiter, F. J. Casson, Y. Camenen, S. Menmuir, L. Horvath, F. Auriemma, T.W. Bache, N. Bonanomi, A. Chankin, E. Delabie, L. Frassinetti, J. Garcia, C. Giroud, D. King, R. Lorenzini, M. Marin, P.A. Schneider, P. Siren, J. Varje, E. Viezzer and JET contributors
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P. Agostinetti, T. Franke, U. Fantz, C. Hopf, N. Mantel, M.Q. Tran
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M. Gelfusa, R. Rossi, M. Lungaroni, F. Belli, L. Spolladore, I. Wyssa, P. Gaudio, A. Murari, JET Contributors
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- R.83. Design of the RFX-mod2 first wall**
Mauro Dalla Palma, Giovanni Berton, Alessandra Canton, Roberto Cavazzana, Giulio Gambetta, Paolo Innocente, Simone Peruzzo, Marco Siragusa, Silvia Spagnolo, Monica Spolaore
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- R.84. MARTe2 and MDSplus integration for a comprehensive fast control and data acquisition system**
G. Manduchi, A. Rigoni, T.W. Fredian, J.A. Stillerman, A. Neto, F. Sartori
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- R.85. On the stoichiometry of zirconium carbide**
Claudia Gasparri, Dhan-sham Rana, Niccolò Le Brun, Denis Horlait, Christos N. Markides, Ian Farnan, William e. Lee
Sci Rep (2020) 10:6347 <https://doi.org/10.1038/s41598-020-63037-0>
- R.86. Error field correction strategies in preparation to MAST-U operation**
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- R.87. Thermal analysis of the RFX-mod2 operating conditions for the design of the temperature measurement system**
Mauro Dalla Palma, Roberto Cavazzana, Andrea Erculiani, Giulio Gambetta, Simone Peruzzo
J Therm Anal Calorim **142**, 2061–2075 (2020); <https://doi.org/10.1007/s10973-020-10351-4>
- R.88. SPIDER plasma grid masking for reducing gas conductance and pressure in the vacuum vessel**
M. Pavei, S. Dal Bello, G. Gambetta, A. Maistrello, D. Marcuzzi, A. Pimazzoni, E. Sartori, G. Serianni, F. Degli Agostini, L. Franchin, M. Tollin
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- R.89. Turbulent filament properties in L and H-mode regime in the RFX-mod operating as a tokamak**
G. Grenfell, M. Spolaore, D. Abate, L. Carraro, L. Marrelli, I. Predebon, S. Spagnolo, M. Veranda, M. Agostini, B.Ph. van Milligen, R. Cavazzana, L. Cordaro, G. De Masi, P. Franz, C. Hidalgo, E. Martines, B. Momo, M.E. Puiatti, P. Scarin, N. Vianello, B. Zaniol, M. Zuin and the RFX-mod team
Nucl. Fusion **60** (2020) 126006; <https://doi.org/10.1088/1741-4326/abaf32>
- R.90. Data driven theory for knowledge discovery in the exact sciences with applications to thermonuclear fusion**
Murari, E. Peluso, M. Lungaroni, P. Gaudio, M. Gelfusa, J. Vega
Sci Rep **10** 19858 (2020); <https://doi.org/10.1038/s41598-020-76826-4>
- R.91. Fast plasma dilution in ITER with pure deuterium shattered pellet injection**
E. Nardon, D. Hu, M. Hoelzl, D. Bonfiglio and the JOREK team
Nucl. Fusion **60** (2020) 126040; <https://doi.org/10.1088/1741-4326/abb749>
- R.92. Erosion and screening of tungsten during inter/intra-ELM periods in the JET-ILW divertor**
Huber, S. Brezinsek, V. Huber, M. Sertoli, G. Sergienko, I. Borodkina, M. Baruzzo, A. Kirschner, D. Borodin, J. Mailloux, S. Aleiferis, P. Carvalho, K. Lawson, Ch. Linsmeier, A. Meigs, S. Menmuir, Ph. Mertens, E. Pawelec, A. Shawf, JET contributors

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- R.93. Development and characterization of thermal helium beam diagnostic with four helium lines for RFX-mod2 experiment**
Agostini, M., Scarin, P., Milazzo, R., Cervaro, V., Ghiraldelli, R.
Rev Sci Instrum **91**, 113503 (2020); <https://doi.org/10.1063/5.0023310>
- R.94. Alternative detection of n = 1 modes slowing down on ASDEX upgrade**
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Appl. Sci. 2020, **10** (21), 7891; <https://doi.org/10.3390/app10217891>
- R.95. Numerical investigation of optimal divertor gas baffle closure on TCV**
D Galassi, H Reimerdes, C Theiler, M Wensing, H Bufferand, G Ciruolo, P Innocente, Y Marandet, P Tamain, the EUROfusion MST1 Team and the TCV Team
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- R.96. Helical magnetic self-organization of plasmas in toroidal pinches with transport barriers formation**
Veranda M., Bonfiglio D., Cappello S., Chacòn L., Escande D.F., di Giannatale G.
EPJ Web of Conferences 230, 00013 (2020), FisMat 2019;
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- R.97. Micromechanical testing of unirradiated and helium ion irradiated SA508 reactor pressure vessel steels: Nanoindentation vs in-situ microtensile testing**
C Gasparrini, A Xu, K Short, T Wei, J Davis, T Palmer, D Bhattacharyya, L Edwards, MR Wenman
Materials Science and Engineering: A **796**, (2020), 139942,
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Conference and Workshops participations and contributions

- P.1. On the road to ITER NBIs: SPIDER improvement after first operation and MITICA 1MV integrated power test**
Vanni Toigo, Deirdre Boilson, Chandramoulli Rotti, Tullio Bonicelli, Mieko Kashiwagi, Arun Chakraborty (invited) - I1.6
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.2. Role of fusion in energy future**
Chiara Bustreo, Francesco Gracceva, Umberto Giuliani, Giuseppe Zollino (invited) - I4.8
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.3. Characterization of SPIDER beam emission profile through beam imaging**
Margherita Ugoletti, Matteo Agostini, Matteo Brombin, Federico Molon, Roberto Pasqualotto, Gianluigi Serianni - P1-47
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.4. Reduction of co-extracted electrons and beam inhomogeneity in the large negative ion source SPIDER**
Antonio Pimazzoni, Matteo Agostini, Nicolò Marconato, Roberto Pasqualotto, Emanuele Sartori, Gianluigi Serianni - P1-78
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.5. Synthesis of an optimized and flexible configuration for the magnetic filter in the SPIDER experiment**
Nicolò Marconato, Matteo Brombin, Mauro Pavei, Marco Tollin, Lucio Baseggio, Michele Fincato, Luca Franchin, Alberto Maistrello, Gianluigi Serianni -P1-81
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.6. Neutral beam injection for DEMO alternative scenarios**
Pietro Vincenzi, J.-F. Artaud, E. Fable, G. Giruzzi, M. Siccino, H. Zohm - P1.92
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.7. A Maximum Likelihood Tomographic Method applied to JET Current Quench Phase**
Michela Gelfusa, Teddy Craciunescu, Emmanuele Peluso, Luca Giacomelli, Vasili Kiptily, Andrea Murari – P1.105
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.8. Development of the RAPTOR suite of codes towards real-time reconstruction of JET discharges**
Chiara Piron, Federico Felici, Blaise Faugerat, Nicolò Ferron, Gabriele Manduchi, Nicolò Marconato, Cederik Meeke, Lidia Piron, Ziga Stancar, Daniel Valcarcel, Dimitri Voltolina, Marcus Weiland – P1.117
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)

- P.9. Custom thermocouple input module for sensors on the Grounded Grid of SPIDER**
Matteo Brombin, Bruno Laterza, Federico Molon, Tommaso Patton, Roberto Pasqualotto – P2.7
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.10. Eurofusion integrated modelling platform in support of ETS**
Dmitriy Yadykin, Olivier Hoenen, Bartek Palak, Michal Owsiak, Dejan Penko, Ludovic Fleury, Thierry Salmon, Daniel Figat, Jonathan Hollocombe, Frederic Imbeaux, Gabriele Manduchi, Marcin Plociennik – P2.9
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.11. Draining analyses of the primary cooling circuits of the SPIDER Beam Source**
Matteo Zaupa, Paolo Tinti, Mauro Dalla Palma, Francesco Fellin, Pierluigi Zaccaria – P2.17
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.12. Design and procurement of the Drying System for SPIDER Beam Source**
Francesco Fellin, Mauro Dalla Palma, Paolo Tinti, Pierluigi Zaccaria, Matteo Zaupa – P2.22
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.13. The beamline for the ITER Heating Neutral Beam Injectors: a case study for development and procurement of high heat flux components**
Mauro Dalla Palma, Roberto Pasqualotto, Emanuele Sartori, Paolo Tinti, Pierluigi Zaccaria, Matteo Zaupa, Alexander Krilov, Alexander Panasenkov, Peter Blatchford, Ben Chuilon, Yong Xue, Stefan Hanke, Santiago Ochoa, Joseph Graceffa, Eduard Bragulat, Gonzalo Micò Montava, Juan Francisco Moreno Canamero – P2.28
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.14. 1MV power supplies integration issues in mitica experiment, the ITER heating neutral beam injector prototype**
Marco Boldrin, Matteo Valente, Samuele Dal Bell, Luca Grando, Vanni Toigo, Pierluigi Zaccaria, Hans Decamps, Hiroyuki Tobar, Muriel Simon, Gerard Gomez Escudero – P2.29
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.15. The Fusion to Hydrogen option in a carbon free energy system**
Umberto Giuliani, Chiara Bustreo, Giuseppe Zollino – P2.41
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.16. Calorimeter conceptual design for Neutral Beam Injector of DTT - CFD optimisation and thermal stress analysis**
Boštjan Končar, Domen Ovtar, Oriol Costa Garrido, Martin Draksler, Piero Agostinetti - P2.72
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.17. Neutron streaming analyses and shielding optimization through HCD openings in DTT tokamak building**

Andrea Colangeli, Silvio Ceccuzzi, Alberto Ferro, Davide Flammini, Nicola Fonnesu, Saul Garavaglia³, Gustavo Granucci, Raul Luis, Giovanni Mariano, Fabio Moro, Romolo Remetti, Afra Romano, Rosaria Villari – P2.94

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P.18. Robustness of the performances of NEG pumping solutions for fusion applications

Fabrizio Siviero, Michele Mura, Enrico Maccallini, Paolo Manini, Emanuele Sartori, Marco Siragusa², Piergiorgio Sonato, Stefan Hanke, Christian Day - P2.175

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P.19. SPIDER Cs Oven functional tests

Michela De Muri, Andrea Rizzolo, Emanuele Sartori, Sofia Cristofaro, Marco Barbisan, Michele Fadone, Diego Ravarotto, Roberto Rizzieri, Roberto Capobianco, Paolo Cinetto, Bruno Leterza, Federico Rossetto, Marzio Rancan, Lidia Armelao, Cesare Taliercio, Gianluigi Serianni, Diego Marcuzzi - P3.19

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P.20. Alternative Detection of n=1 Modes Slowing Down on AUG

Emmanuele Peluso, Riccardo Rossi, Andrea Murari, Pasquale Gaudio, Michela Gelfusa, Asdex Upgrade Team, EUROfusion MST1 Team - P3.29

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P.21. Investigation of corrosion-erosion phenomena in the primary cooling system of SPIDER

Caterina Cavallini, Mauro Dalla Palma, Francesco Fellin, Claudia Gasparrini, Paolo Tinti, Andrea Zamengo, Matteo Zaupa – P3.30

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P.22. Study of the Primary Heat Transfer System of an hybrid EU DEMO with different Breeding Blanket concepts

Matteo Zaupa, Mauro Dalla Palma, Luciana Barucca - P3.37

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P.23. First tests and commissioning of the emittance scanner for SPIDER

Carlo Poggi, Giovanni Berton, Matteo Brombin, Daniele Fasolo, Luca Franchin, Bruno Laterza, Roberto Pasqualotto, Diego Ravarotto, Emanuele Sartori, Marco Tollin, Gianluigi Serianni – P3.38

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P.24. A double-ended helicon source to symmetrize RAID plasma

Rémy Jacquier, Riccardo Agnello, Michele Fadone, Philippe Guittienne, Alan Howling, Ivo Furno - P3.39

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- P.25. Final Design of Electrostatic Sensors for MITICA Beam Line Components**
Silvia Spagnolo, Monica Spolaore, Mauro Dalla Palma, Roberto Pasqualotto, Andrea Barzon, Matteo Brombin, Luca Franchin, Emanuele Sartori, Andrea Tiso, Michele Visentin – P3.80
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.26. Conceptual design of the power supplies for DTT Neutral Beam Injector**
Alberto Ferro, Francesco Lucchini, Piero Agostinetti, Daniele Ratti, Gustavo Granucci, Afra Romano, Roberto Romano, Antonio Cucchiaro, Alessandro Princiotta - P3.82
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.27. Design validation of the vacuum-tight electrically insulated crossed joints of the new Vacuum Vessel for the RFX-mod2 experiment**
Simone Peruzzo, Andrea Rizzolo, Federico Rossetto, Mauro Dalla Palma – P3.83
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.28. Design of the new supporting structure for the Passive Stabilizing Shell of RFX-mod2**
Giovanni Berton, Marco Bernardi, Mauro Dalla Palma, Diego Marcuzzi, Mauro Pavei, Simone Peruzzo – P3.94
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.29. Feasibility study on RFX-mod2 performance improvement by additional magnetic energy storage**
Francesco Lunardon, Alberto Maistrello, Elena Gaio, Roberto Piovan - P3.116
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.30. Application studies of the Modular Multilevel Converter topology to the Acceleration Grid Power Supply of the DEMO Neutral Beam Injector**
Daniele Ratti, Alberto Ferro, Elena Gaio - P3.117
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.31. Benchmarking of beam acceleration codes on a high voltage negative ion accelerator for fusion with a new hypothesis on the beam meniscus**
Sylvestre Denizeau, Daniele Aprile, Piero Agostinetti, Fabio Veronese, Tommaso Patton, Antonio Pimazzoni, Junichi Hiratsuka, Masahiro Ichikawa, Glynnis Saquilayan, Atsushi Kojima, Mieko Kashiwagi, Giuseppe Chitarin - P3.135
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.32. Manufacturing, on-site installation and acceptance test activities of the MITICA vacuum vessel**
Matteo Valente, Stefano Manfrin, Pierluigi Zaccaria, Andrea Barzon, Fabio Degli Agostini, Daniele Fasolo, Federico Rossetto, Marco Tollin, Davide Bolcato, Antonio Parma, Diego Ruaro, Marco Zanotto, Mirco Casa, Mauro Giupponi, Gonzalo Micó Montava, Juan Francisco Moreno, Chandramouli Rotti, Marc Urbani - P3.150
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)

- P.33. Design and test of a mitigation system against voltage ringing in MITICA AGPS**
Mattia Dan, Loris Zanotto, Claudio Finotti, Mauro Perna, Ettore Merli, Daniel Gutierrez, Hans Decamps, Michel Huart - P3.172
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- P.34. Improvements to SPIDER beam source after two years of operation**
Mauro Pavei, Matteo Brombin, Samuele Dal Bello, Luca Franchin, Alberto Maistrello, Nicolò Marconato, Diego Marcuzzi, Marco Tollin – P4.15
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.35. Application of the Mirror Procedure to the Robustness and Fault Analysis of Divertor Tokamak Test facility**
Andrea Gaetano Chiariello, Matteo Baruzzo, Raffaele Martone, Alfredo Pironti, David Terranova - P4.36
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.36. Development of a set of movable electrostatic probes to characterize the plasma in the ITER neutral beam negative-ion source prototype**
Emanuele Sartori, Brombin Matteo, Roberto Cavazzana, Vannino Cervaro, Fabio Degli Agostini, Michele Fadone, Daniele Fasolo, Luca Grandi, Bruno Laterza, Gianluca Moro, Antonio Pimazzoni², Carlo Poggi, Beatrice Segalini³, Monica Spolaore, Cesare Taliercio, Marco Tollin, Margherita Ugoletti, Pierluigi Veltri, Andrea Zamengo, Matteo Zuin, Gianluigi Serianni – P4.50
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.37. Assessment of Measurement Performance for a Low Field Side IDTT Plasma Position Reflectometry System**
Filipe da Silva, Jorge Ferreira, Jorge Santos, Stéphane Heuraux, Emanuel Ricardo, António Silva, Gianluca De Masi, Onofrio Tudisco, Roberto Cavazzana, Ocleto D'Arcangelo - P4.66
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.38. Improvements in the SPIDER RF system**
Alberto Maistrello, Mauro Recchia, Andrea Zamengo, Marco Bernardi, Giuseppe Chitarin, Mattia Dan, Ferdinando Gasparini, Palak Jain, Marco Bigi, Elena Gaio, Diego Marcuzzi, Mauro Pavei, Loris Zanotto – P4.88
31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.39. The upgrade of the Control and data Acquisition system of RFXMod2**
Gabriele Manduchi, Adriano Luchetta, Cesare Taliercio, Andrea Rigoni, Giulio Martini, Roberto Cavazzana, Nicolo Ferron, Paolo Barbato, Paola Simionato, Modesto Moressa, Federico Molon, Mauro Breda, Enrico Zampiva, Roberto Capobianco - P4.119
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- P.40. Clean industrial progresses and the rise of electricity demand in the penetration of nuclear fusion in the EU energy mix**
 Daniele Lerede, Mirko Saccone, Chiara Bustreo, Francesco Gracceva, Laura Savoldi - P4.125
 31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.41. MITICA interlock system: from prototype implementation to final system design**
 Adriano Luchetta, Nicola Pomaro, Cesare Taliercio, Modesto Moressa, Francesco Paolucci, Carmelo Vincenzo Labate - P4.166
 31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.42. Progress in preparing real-time control schemes for Deuterium-Tritium operation in JET**
 L. Piron, D. Valcarcel, I.S. Carvalho, R. Felton, D. Ferreira, M. Fontana, M. Lennholm, P.J. Lomas, E. De La Luna, A. Peacock, A. Pau, C. Piron, F. Rimini, C. Sozzi, C.I. Stuart
 31st edition of the Symposium on Fusion Technology (SOFT 2020) 20-25 September 2020 (online)
- P.43. Heterogeneous diagnostic data integration for real-time plasma analysis**
 Rigoni Andrea, Roberto Cavazzana, Marco Gobbin, Gabriele Manduchi, Cesare Taliercio, Adriano Luchetta
 22nd IEEE Real Time Conference- virtual, 12-23 October 2020
- P.44. Micromechanical testing of unirradiated and helium ion irradiated SA508 reactor pressure vessel steels**
 Gasparrini Claudia, Alan Xu, Tao Wei, Ken Short, Joel Davis, Tim Palmer, Dhriti Bhattacharyya, Lyndon Edwards, Mark R. Wenman
 NuMat2020: The Nuclear Materials Conference – online, 26–29 October 2020
- P.45. Reconnection processes in 3d pinch configurations**
 Cappello Susanna, D. Bonfiglio, M. Veranda, G. Di Giannatale, D.F. Escande, F. Sattin, A. Kryzhanovskyy, L. Spinicci, N. Vivenzi; (invited) - remote
 4th Asia-Pacific Conference on Plasma Physics, 26-31 Oct, 2020
- P.46. Power balance analysis of JET-ILW L-H transition in Deuterium plasmas**
 P. Vincenzi, E. R. Solano, E. Delabie, C. Bourdelle, J. Citrin, G. Snoep, A. Baciero, P. Carvalho, M. Chernyshova, J.C. Hillesheim, A. Huber, S. Menmuir, F. I. Parra and JET contributors (Invited), 4th Asia-Pacific Conference on Plasma Physics, 26-31 Oct, 2020, Remote
- P.47. Perspectives of Fusion-Fission Hybrid Systems with the Reversed Field Pinch as a neutron source**
 Piovan Roberto, P. Agostinetti, C. Bustreo, R. Cavazzana, D. F. Escande, E. Gaio, F. Lunardon, A. Maistrello, M.E. Puiatti, M. Valisa, G. Zollino, M. Zuin (invited)
 The 29th International Toki Conference on Plasma and Fusion Research ITC29, virtual, Ceratopia Toki, Japan, 27–30 October 2020
- P.48. Complexity and its control in dissociation reaction network**
 Antoni Vanni, Ferron N., Serianni G. Longo S.
 The 29th International Toki Conference on Plasma and Fusion Research ITC29, virtual, Ceratopia Toki, Japan, 27–30 October 2020
- P.49. Conceptual design of the beamline for the DTT Neutral Beam Injector**
 Agostinetti Piero, Tommaso Bolzonella, Massimiliano Bonesso, Razvan Dima, Giacomo Favero, Alberto Ferro, Marco Gobbin, Gustavo Granucci, Chundong Hu, Francesco Lucchini,

Adriano Pepato, Nicola Pilan, Pietro Rebesan, Afra Romano, Gianluca Spizzo, Fabio Veronese, Pietro Vincenzi, Yahong Xie, Yuanlai Xie
The 29th International Toki Conference on Plasma and Fusion Research ITC29, virtual, Ceratopia Toki, Japan, 27–30 October 2020

P.50. Science Basis and Present Status of the new Divertor Tokamak Test facility

Martin Piero (invited)

The 29th International Toki Conference on Plasma and Fusion Research ITC29, virtual, Ceratopia Toki, Japan, 27–30 October 2020

P.51. Jacobian-free Newton-Krylov Method for Efficient Solution of Large Scale Non-linear Magnetostatic Problems

Bonotto Matteo, D. Abate

IEEE CEFC 2020 - International Conference on Electromagnetic Field Computation (online), Pisa, Italy, 16-18 November 2020

P.52. Model based procedure for in situ error compensation of spatially distributed magnetic sensors

Marconato Nicolo, Paolo Bettini, Roberto Cavazzana, Lionello Marrelli, Dimitri Voltolina

IEEE CEFC 2020 - International Conference on Electromagnetic Field Computation (online), Pisa, Italy, 16-18 November 2020

P.53. Error Fields computation in the RFX-mod2 Reversed field Pinch

Bettini Paolo, R. Cavazzana, G. Marchiori, N. Marconato, L. Marrelli, R. Specogna, G. Spizzo, R. Torchio, D. Voltolina, P. Zanca

IEEE CEFC 2020 - International Conference on Electromagnetic Field Computation (online), Pisa, Italy, 16-18 November 2020

P.54. Validation of DIII-D passive wall model for coupled electromagnetic and magnetohydrodynamic problem

Bonotto Matteo, Fabio Villone, and Yueqiang Liu

IEEE CEFC 2020 - International Conference on Electromagnetic Field Computation (online), Pisa, Italy, 16-18 November 2020

P.55. Interaction of tearing modes with passive structures in a tokamak

Voltolina Dimitri, P. Bettini, R. Specogna, G. Spizzo, M. Maraschek, V. Igochine

IEEE CEFC 2020 - International Conference on Electromagnetic Field Computation (online), Pisa, Italy, 16-18 November 2020

P.56. Pilot FFHR based on a RFP as a fusion core

R. Piovan, P. Agostinetti, C. Bustreo, F. Bruno, R. Cavazzana, A. Cemmi, N. Cherubini, M. Ciotti, D. F. Escande, E. Gaio, R. Iacovacci, G. Lombardi, G. Lomonaco, F. Lunardon, G. A. Marzo, A. Maistrello, E. Mancini, A. Mariani, G. Mingrone, M. Osipenko, F. Panza, M.E. Puiatti, G. Ricco, M. Ripani, M. Valisa, T. Vignaroli, G. Zollino, M. Zuin

FUNF14 - 4th International Conference on Fusion-Fission sub-critical systems for waste management and safety (virtual), Moscow, Russia, 25-27 November 2020

P.57. Estimation of plasma electron density inside the radio frequency inductively coupled driver of spider

P. Jain, M. Recchia, E. Gaio, A. Maistrello, B. Zaniol, G. Serianni – (oral)

47th IEEE International Conference on Plasma Science (ICOPS) 2020 (virtual), Singapore, 6-10 December 2020

- P.58. Development and first operation of a Cavity Ring Down Spectroscopy diagnostic in the negative ion source SPIDER**
M. Barbisan, R. Pasqualotto, R. Agnello, M. Pilioci, G. Serianni, C. Taliercio, V. Cervaro, F. Rossetto, A. Tiso
HTPD 2020 High Temperature Plasma Diagnostics Conference (virtual), 14-17 December 2020
- P.59. Custom thermocouple input module for sensors on the Grounded Grid of SPIDER**
Brombin Matteo, B. Laterza, F. Molon, T. Patton, R. Pasqualotto
HTPD 2020 High Temperature Plasma Diagnostics Conference (virtual), 14-17 December 2020
- P.60. A DTT polarimeter/interferometer design: characterization of the polarimetric & interferometric signals**
Fiorucci Donatella, L. Giudicotti, P. Innocente, D. Terranova, C. Mazzotta, O. Tudisco
HTPD 2020 High Temperature Plasma Diagnostics Conference (virtual), 14-17 December 2020
- P.61. First operation of SPIDER and 1MV integrated power test in MITICA**
Diego Marcuzzi V. Toigo, C. Rotti, D. Boilson, T. Bonicelli, M. Kashiwagi, M. Singh and the contributing Staff of NBTF Team, IO, F4E, QST, IPR and other laboratories (Invited)
7th International Symposium on Negative Ions, Beams and Sources (NIBS)
- P.62. Recent research activities on ITER NBTF**
G. Serianni and NBTF Team (invited)
Japanese Negative ion Workshop 2020 (virtual), 16-17 December 2020
- P.63. Numerical modelling and validation of disruption mitigation by SPI**
Daniele Bonfiglio, Matthias Hoelzl, Di Hu, Eric Nardon, Umar Sheikh, Ryan Sweeney, Javier Artola, Guido Huijsmans and JOEKE Team, Pedro Carvalho, Gabor Szepesi and JET Contributors (invited)
28th European Fusion Programme Workshop December 2020 (online)