

Lista Pubblicazioni

- Articoli in Rivista
- [1] M. Pasella *et al.*, incl. **F. PISANO** (2023), "Decision trees to evaluate the risk of developing multiple sclerosis", *Frontiers in Neuroinformatics*, vol. 17.
 - [2] **F. PISANO** *et al.* (2023), "Decision trees for early prediction of inadequate immune response to coronavirus infections: a pilot study on Covid-19", *Frontiers in Medicine*, vol. 10.
 - [3] Y. Gao *et al.*, incl. **F. PISANO** (2023), "Improvement in the simulation tools for heat distribution predictions and control of baffle and middle divertor loads in Wendelstein 7-X", *Nucl. Fusion*, vol. 63 (2), art. n. 026031.
 - [4] E. Maragkoudakis *et al.*, incl. **F. PISANO** (2022), "On the interaction between the island divertor heat fluxes, the scrape-off layer radial electric field and the edge turbulence in Wendelstein 7-X plasmas", *Nucl. Fusion*, vol. 63 (2), art. n. 026011.
 - [5] E. Aymerich *et al.*, incl. **F. PISANO** (2023), "CNN disruption predictor at JET: Early versus late data fusion approach", *Fusion Eng. Des.*, vol. 193, art. n. 113668.
 - [6] E. Aymerich *et al.*, incl. **F. PISANO** (2023), "Physics Informed Neural Networks towards the real-time calculation of heat fluxes at W7-X", *Nucl. Mater. Energy*, vol. 34, art. n. 101401.
 - [7] E. Aymerich *et al.*, incl. **F. PISANO** (2023), "Performance Comparison of Machine Learning Disruption Predictors at JET", *Appl. Sci.*, vol. 13 (3), art. n. 2006.
 - [8] M. J. H. Cornelissen *et al.*, incl. **F. PISANO** (2022), "Identification of fast ion wall loads in Wendelstein 7-X from thermographic measurements", *Plasma Phys. Control. Fusion*, vol. 64 (12), art. n. 125015.
 - [9] M. Zhao *et al.*, incl. **F. PISANO** (2022), "Distributions of deposits and hydrogen on the upper and lower TDUs3 target elements of Wendelstein 7-X", *Nucl. Fusion*, vol. 62 (10), art. n. 106023.
 - [10] G. Sias *et al.*, incl. **F. PISANO** (2022), "Inter-machine plasma perturbation studies in EU-DEMO-relevant scenarios: lessons learnt for prediction of EM forces during VDEs", *Nucl. Fusion*, vol. 62 (7), art. n. 076004.
 - [11] E. Aymerich *et al.*, incl. **F. PISANO** (2022), "Disruption prediction at JET through deep convolutional neural networks using spatiotemporal information from plasma profiles", *Nucl. Fusion*, vol. 62 (6), art. n. 066005.
 - [12] T. S. Pedersen *et al.*, incl. **F. PISANO** (2022), "Experimental confirmation of efficient island divertor operation and successful neoclassical transport optimization in Wendelstein 7-X", *Nucl. Fusion*, vol. 62 (4), art. n. 042022.
 - [13] A. P. Sitjes *et al.*, incl. **F. PISANO** (2021), "Real-time detection of overloads on the plasma-facing components of Wendelstein 7-X", *Appl. Sci.*, vol. 11 (24), art. n. 11969.
 - [14] V. Perseo *et al.*, incl. **F. PISANO** (2021), "2D measurements of parallel counter-streaming flows in the W7-X scrape-off layer for attached and detached plasmas", *Nucl. Fusion*, vol. 61 (11), art. n. 116039.
 - [15] C. D. Beidler *et al.*, incl. **F. PISANO** (2021), "Demonstration of reduced neoclassical energy transport in Wendelstein 7-X", *Nature*, vol. 596 (7871), pp. 221-226.
 - [16] **F. PISANO** *et al.* (2021), "Learning Control Coil Currents from Heat-Flux Images Using Convolutional Neural Networks at Wendelstein 7-X", *Plasma Phys. Control. Fusion*, vol. 63 (2), art. n. 025009.
 - [17] Y. Gao *et al.*, incl. **F. PISANO** (2020), "Understanding Baffle Overloads Observed in High-Mirror Configuration on Wendelstein 7-X", *Nucl. Fusion*, vol. 60 (9), art. n. 096012.
 - [18] H. Niemann *et al.* incl. **F. PISANO** (2020), "Large Wetted Areas of Divertor Power Loads at Wendelstein 7-X", *Nucl. Fusion*, vol. 60 (8), art. n. 084003.
 - [19] **F. PISANO** *et al.* (2020), "Convolutional Neural Network for Seizure Detection of Nocturnal Frontal Lobe Epilepsy", *Complexity*, vol. 2020, art. n. 4825767.
 - [20] **F. PISANO** *et al.* (2020), "Tools for Image Analysis and First Wall Protection at W7-X", *Fusion Sci. Technol.*, vol. 76 (8), pp. 933-941.
 - [21] H. Niemann *et al.* incl. **F. PISANO** (2020), "Features of near and far scrape-off layer heat fluxes on the Wendelstein 7-X inboard limiters", *Nucl. Fusion*, vol. 60 (1), art. n. 016014.
 - [22] K. C. Hammond *et al.* incl. **F. PISANO** (2019), "Drift effects on W7-X divertor heat and particle

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- [24] E. Joffrin *et al.* incl. **F. PISANO** (2019), “Overview of the JET preparation for deuterium-tritium operation with the ITER like-wall”, *Nucl. Fusion*, vol. 59 (11), art. n. 112021.
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- [26] S. Äkäslompolo *et al.* incl. **F. PISANO** (2019), “Validating fast-ion wall-load IR analysis-methods against W7-X NBI empty-torus experiment”, *J. Instrum.*, vol. 14 7), art. n. P07018.
- [27] T. Sunn Pedersen *et al.* incl. **F. PISANO** (2019), “First divertor physics studies in Wendelstein 7-X”, *Nucl. Fusion*, vol. 59 (9), art. n. 096014.
- [28] T. Klinger *et al.* incl. **F. PISANO** (2019), “Overview of first Wendelstein 7-X high-performance operation”, *Nucl. Fusion*, vol. 59 (11), art. n. 112004.
- [29] J. D. Lore *et al.* incl. **F. PISANO** (2019), “Measurement and modeling of magnetic configurations to mimic overload scenarios in the W7-X stellarator”, *Nucl. Fusion*, vol. 59 (6), art. n. 066041.
- [30] Ali *et al.* incl. **F. PISANO** (2019), “Initial results from the hotspot detection scheme for protection of plasma facing components in Wendelstein 7-X”, *Nucl. Mat. Energy*, vol. 19, pp. 335–339.
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- [34] A. Puig Sitjes *et al.* incl. **F. PISANO** (2019), “Observation of thermal events on the plasma facing components of Wendelstein 7-X”, *J. Instrum.*, vol. 14 (11), art. n. C11002.
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- [38] S. A. Lazerson *et al.* incl. **F. PISANO** (2018), “Error fields in the Wendelstein 7-X stellarator”, *Plasma Phys. Control. Fusion*, vol. 60 (12), art. n. 124002.
- [39] M. Jakubowski *et al.* incl. **F. PISANO** (2018), “Infrared imaging systems for wall protection in the W7-X stellarator”, *Rev. Sci. Instrum.*, vol. 89 (10), art. n. 10E116.
- [40] A. Dinklage *et al.* incl. **F. PISANO** (2018), “Magnetic configuration effects on the Wendelstein 7-X stellarator”, *Nat. Phys.*, vol. 14 (8), pp. 855–860.
- [41] D. Böckenhoff *et al.* incl. **F. PISANO** (2018), “Reconstruction of magnetic configurations in W7-X using artificial neural networks”, *Nucl. Fusion*, vol. 58 (5), art. n. 056009.
- [42] B. Cannas *et al.* incl. **F. PISANO** (2018), “Nonlinear Dynamic Analysis of D_{α} Signals for Type I Edge Localized Modes Characterization on JET with a Carbon Wall”, *Plasma Phys. Control. Fusion*, vol. 60 (2), art. n. 025010.
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- [45] M. Hirsch *et al.* incl. **F. PISANO** (2017), “Confinement in Wendelstein 7-X limiter plasmas”, *Nucl. Fusion*, vol. 57 (8), art. n. 086010.
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- [53] F. Romanelli *et al.* incl. **F. PISANO** (2015), “Overview of the JET Results”, *Nucl. Fusion*, vol. 55 (10), art. n. 104001.
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- [58] B. Cannas *et al.* incl. **F. PISANO** (2019), “Convolutional Neural Networks for the Identification of Filaments from Fast Visual Imaging Cameras in Tokamak Reactors”. In: A. Esposito, M. Faundez-Zanuy, F. Morabito, E. Pasero (eds) *Neural Advances in Processing Nonlinear Dynamic Signals*. WIRN 2017 2017. Smart Innovation, Systems and Technologies, vol 102. Springer, Cham.

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- [60] F. Militello *et al.* incl. **F. PISANO** (2019), “Predicting Scrape-Off Layer profiles and filamentary transport for reactor relevant devices”, *Proceedings of the 46th EPS Conference on Plasma Physics (EPS 2019)*, Milan, Italy, 8–12 July 2019.
- [61] A. Leviness *et al.* incl. **F. PISANO** (2018), “Neutral particle fluxes on the divertor during overload mimic scenarios in Wendelstein 7-X”, *Proceedings of the 45th EPS Conference on Plasma Physics (EPS 2018)*, Prague, Czech Republic, 2–6 July 2018.
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