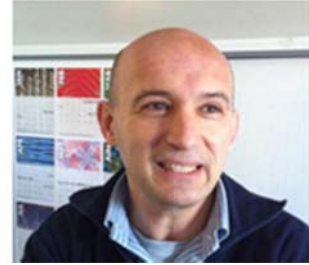


Fabio Sattin

Office: Consorzio RFX, Corso Stati Uniti 4, 35127 Padova, Italy
Tel : +39 0498295030 Fax: +39 0498700718
fabio.sattin@igi.cnr.it



PRESENT POSITION

Researcher, Theory Group, Consorzio RFX, Padova (Italy).

RESEARCH FOCUS

- Numerical and theoretical expertise in: modelling of core plasma transport using diffusion equation; stability calculation of microtearing modes; identification of patterns in edge plasma fluctuations via statistical analysis techniques; statistical mechanics of long-ranged and out-of-equilibrium systems.
- Co-founder of MIMESIS: an interdisciplinary GPU-based high-performance scientific computing center at physics department, Università di Padova.

OTHER ACTIVITIES

- Supervisor of undergraduate and graduate students.
- Acting as referee for several plasma and/or general physics journals (including Nuclear Fusion, Physics of Plasmas, Plasma Physics and Controlled Fusion, Europhysics letters, Physical Review E).

SCIENTIFIC PRODUCTION

- More than 100 papers in peer-reviewed journals as of September 2020, including 6 Physical Review Letters papers.
- 1000+ citations in total. Present h-index: $H = 22$.
- Author or co-author in 100+ conference contributions (oral, poster presentations and invited talks).
- Invited speaker:
2012 EPS/ICPP Conference—Stockholm (Sweden)
2013 Workshop on Fusion Data Processing, Validation and Analysis-Ghent (Belgium)
2019 AAPPs-DPP Hefei (China)

SELECTED RECENT PUBLICATIONS

- Escande, Gondret, **Sattin**, “Relevant heating of the quiet solar corona by Alfvén waves: a result of adiabaticity breakdown”, Scientific Reports 9, 14274 (2019)
- Zanca, **Sattin**, Escande, “A power-balance model of the density limit in fusion plasmas: application to the L-mode tokamak”, Nuclear Fusion 59, 126011 (2019)
- Zanca, **Sattin**, Escande, Pucella, Tudisco, “A unified model of density limits in fusion plasmas”, Nuclear Fusion 57, 056010 (2017)
- **Sattin**, Escande, Auriemma, Urso, Terranova, “Difficulties and solutions for estimating transport by perturbative experiments” Plasma Physics and Controlled Fusion 56, 114008 (2014)
- Predebon, **Sattin**, “On the linear stability of collisionless microtearing modes”, Physics of Plasmas 20, 040701 (2013)
- Escande, **Sattin**, “Calculation of transport coefficient profiles in modulation experiments as an inverse problem”, Physical Review Letters 108, 125007 (2012)
- Predebon, **Sattin**, Veranda, Bonfiglio, Cappello “Microtearing Modes in Reversed Field Pinch Plasmas”, Physical Review Letters 105, 195001 (2010)

