

## Rémy GUIRLET

Institut de recherche sur la fusion magnétique  
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PhD: University Paris XI-Orsay, 1990  
Habilitation à Diriger des Recherches:  
2008 (Université Aix-Marseille I)  
Supervision of 3 PhDs + one in progress

## PHYSICIST

### Research

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- 2003-now**      **Impurity sources and transport in turbulent tokamak plasmas**  
Tokamaks Tore Supra and WEST (France), JET (UK), ASDEX-Upgrade (Germany) - VUV spectroscopy measurements, impurity transport modelling
- 1992-2002**      **Particle sources in tokamak plasma edge, impurity behaviour in stochastized boundary plasmas**  
Tokamak Tore Supra (France) - Visible spectroscopy: instruments, experiments and impurity sources studies

### Teaching

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- Since 2019**      **Deputy Coordinator of Erasmus Mundus Master programme FUSION-EP**  
(Consortium of Universities: Gent, Madrid, Marseille, Nancy, Prague, Stuttgart)
- 2017-now**      **Coordinator of IRFM Higher Education activities**  
Coordination with Universities and with IRFM teaching staff, steering committees of relevant educational programmes, initiation of new courses and diplomas.
- 2007-now**      **French Master Federation on Fusion Sciences**  
**European Master on Fusion**  
Course on Particle and heat transport in tokamaks, organisation of 4-weeks course for 40-50 students: lectures and lab projects - remote experiments on GOLEM, COMPASS (Czech Republic), ASDEX-Upgrade and in IRFM labs.
- 2003-2010**      **Master course: Fusion Sciences**  
Course on Emission diagnostics for impurity studies

### Expertise

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- Member of the steering committee of the Erasmus Mundus Master programme FUSION-EP
- Member of the steering committee of the ADAS international collaboration (atomic physics data for magnetic fusion and astrophysics)
- Representative of France at the International Atomic Energy Agency Subcommittee for Atomic, Molecular and Plasma-surface Interaction Data

### Recent relevant publications

**133 publications, 3950 citations, H factor: 35**

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- *Absolute sensitivity calibration of an extreme ultraviolet spectrometer for tokamak measurements*  
By: Guirlet, R.; Schwob J L; Meyer O. and S. Vartanian.  
JOURNAL OF INSTRUMENTATION Volume: 12 (2017) P01006
- *Dynamics of heavy impurities in non-linear MHD simulations of sawtooth tokamak plasmas*  
By: Ahn; Jae-H, Garbet; X, Lutjens, H.; Guirlet, R  
PLASMA PHYSICS AND CONTROLLED FUSION Volume: 58 (2016)
- *Impurity density derivation from bandpass soft x-ray tomography: applicability, perspectives and limitations*  
By: Vezinet, D.; Mazon, D.; Guirlet, R.; et al.  
NUCLEAR FUSION Volume: 54 (2014)
- *Experimental and theoretical study of nickel transport dependence on gradients in Tore Supra*  
By: Villegas, D.; Guirlet, R.; Bourdelle, C.; et al.  
NUCLEAR FUSION Volume: 54 (2014)