



### **Piergiorgio Sonato**

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### **Scientific Curriculum**

- 1983-1992 he worked for the design and construction of the thermonuclear fusion experiment RFX in the research group called “Plasma Engineering Group”.
- 1992-2001 He has been Group Leader of the “Plasma Engineering Group” working in the research activities correlated to the operation of RFX and in other fusion experimental devices in Europe, in Japan and in USA.
- 1999-2007 he coordinated the experimental activities on the prediction of the plasma disruptive events in the European tokamaks JET (UK) and Asdex Upgrade (Germany).
- 2001-2004 project leader for the modifications of the RFX experimental device.
- 2001-2007 technical responsible for the numerical evaluation of electromagnetic loads for the design of radiofrequency heating antennas for thermonuclear fusion experiments for ITER (France), JET (UK) and Tore Supra (France).
- 2003-2006 responsible officer for the design and the construction of electromagnetic transducers for the measurements of halo currents flowing from the plasma to the metallic first wall in JET (UK).
- From 2007 he is team leader for the design and the construction of the prototype of the heating negative neutral beam injector to be installed in thermonuclear fusion experiment ITER. The prototype will be built and installed in a test facility in Padova.
- He works also in the industrial application of plasma technologies.

### **Teaching activity**

- 1984-1994 he taught “Complements of Electromagnetism” in the course of Electrical Science for the curricula of electrical engineers that was taught by Prof. Luciano Merigliano.
- 1995-1998 he taught “Electrical Science” for the Diploma on Informatic Engineering and Environmental Engineering in the Trento University.
- 1999-2001 he taught “Electrical Science”, “Theory of electric networks” and “Automatic design of electric and magnetic devices” at the University of Cagliari. This last course will be taught also up to 2004.
- From the academic year 2001/02 he teaches “Electrical Science” and “Industrial Plasma Applications” at the University of Padova.
- From 1999, he has been teacher of "UHV technology applied to fusion experiments, first wall components, vacuum vessels and surface treatments" in the postgraduate course in Plasma Engineering and Controlled Thermonuclear Fusion.
- He has been tutor of many students for their final dissertation for the title of Graduate Electrical Engineer, Graduate Mechanical Engineer and Graduate Electronic Engineer.
- He has been tutor of PhD students both at the University of Cagliari and at the University of Padova.

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