

## CURRICULUM VITAE OF PIERO MARTIN

Piero Martin (born in 1962) is **full professor of physics** at the Physics Department of the University of Padova, Italy and an active researcher in the field of controlled thermonuclear fusion. He is Fellow of the American Physical Society and member of the European Physical Society and has a broad international research and academic experience.

He is **head of the scientific programme of the european experiment RFX** for the study of controlled thermonuclear magnetic fusion. RFX is a reversed field pinch (RFP) device based in Padova, whose staff includes about 50 researchers and 25 technicians. RFX is the largest RFP device worldwide, and one of the world leading experiments in the area of Magneto-Hydro-Dynamic stability feedback control. The RFX experiment is located in the laboratory of the Consorzio RFX. Consorzio RFX is a joint venture between CNR, the Italian Agency for Alternative Energies (ENEA), University of Padova, the National Institute for Nuclear Physics (INFN) and a private company, Acciaierie Venete s.p.a. Its main goal is to perform education and research activities on controlled thermonuclear fusion within the framework of a contract with the European agency EURATOM



He is presently serving as **chair of the EFDA European Topical Group on "Plasma Stability and Control"** and **deputy chair of the ITPA MHD Stability Topical Group**. EFDA (European Fusion Development Agreement) is an agreement between European fusion research institutions and the European Commission to strengthen their coordination and collaboration, and to participate in collective activities. As chair of this Topical Group he is charged with promoting coordinated and focused research developments in Europe in the areas of stability and its active control in fusion plasmas.

**His present international research management experience** includes his role as chair of the *Executive Committee of the International Energy Agency (IEA) Implementing Agreement on RFP research*. He is member of the European delegation in the International Tokamak Physics Activity (ITPA) MHD Topical Group. For the period 2005-07 he led the "MHD instabilities and their active control" Task Force in the ASDEX Upgrade experiment in Garching.

Piero Martin is the **director of the International Doctorate in Fusion Science and Engineering**, jointly organized by the Universities of Padova, Lisbon and Munich (LMU)

He is member of the "International Liason Committee" of the "Center for Magnetic Self-Organization", a frontier physics center of the US National Science Foundation. He serves in the Coordinating Committee of the EURATOM Bilateral Cooperation Agreement with USA.

For the period 2005-07 he served as **Task Force Leader** of the "**MHD instabilities and their active control**" Task Force in the ASDEX Upgrade fusion experiment of the Max-Planck Institut für Plasmaphysik in Garching. In this role, he was responsible for the management of the experimental program in the area of MHD instabilities and of their active control.

From 1997 to 2007 he was group leader of a physics research group at Consorzio RFX. In this role, he was responsible for both the scientific and the financial management of the group.

**His expertise in fusion covers several areas, both in science and management**. He has contributed to both RFP and Tokamak physics. Author of 109 papers in refereed journals, he was invited to talk and lecture in many international Universities and research centers in Europe, Japan and USA and at the main international conferences and schools, like for example: the UN IAEA Fusion Conferences in 2000, 2002, 2008 and 2010, the European Physical Society Conference on Plasma Physics and Controlled Fusion, the meeting of the Division of Plasma Physics of the American Physical Society, the International Conference on Plasma Physics, the meeting of the Japan Society of Plasma Science and Nuclear Fusion Research. He has been promoting and managing **several international collaborations and projects**.

He is active in outreach and divulgation of physics and of fusion as energy source and has been supervisor of many undergraduate and Ph.D. thesis. In 2004 and 2009 he was invited to give a talk on fusion at the Science Festival in Genova, which is the most important national event for science outreach. He also gave several public talks on fusion and energy needs in a sustainable environment, writing also papers on the same subject.