Pascal MARQUET ICPEF.
Birth date : 30th of April 1960.
French nationality. Married.
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Research scientist at Météo-France.
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42 Av G. Coriolis,
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Diplomas

2016 Habilitation Degree (Polytechnic National Institute of Toulouse / INPT - Toulouse)

Title: *A study of moist-air energetics and of physical parameterizations of the atmosphere: properties of Exergy, Available Enthalpy, Entropy and Enthalpy*. President: O. Thual (INPT). Jury: J.P. Chaboureau (OMP), F. Hourdin (LMD), R. Tailleux (Univ. Reading), J.-L. Redelsperger (LOPS) and L. Terray (CERFACS).

1995 Award: "Prud'homme's prize" received from the French Meteorological Society in September 1995 for the PhD work.

1994 PhD Thesis (University Paul Sabatier / Toulouse)

Title: *Applications of the concept of Exergy to atmospheric energetics. The concepts of dry-air and moist-air Available Enthalpy*. Advisor: D. Cadet (LMD). Jury: R. Sadourny (LMD), Prof. R. P. Pearce (Univ. of Reading), J.-F. Geleyn (CNRM), G. Vedrenne (UPS).

1986 - 1988 Engineering degree (French School of Meteorology, ENM, Toulouse)

1980 - 1983 First Engineering degree (French School of Meteorology, ENM, Toulouse)

Research Positions

2014 to now : Research scientist position at the Centre National de Recherches Météorologiques (CNRM CNRS and Météo-France), Toulouse, France.

Area of specialization :

1) Code/tunning of physics package of ARPEGE and AROME NWP models.

2) Study of moist-air thermodynamics (entropy, enthalpy).

3) Applications of Exergy to atmospheric science (available enthalpy).

1995 – 2008 Research scientist in the ARPEGE-Climate team (tuning in 1995-99 of the moist turbulence diagnostic "Mellor-Yamada 2.0" scheme; tuning in 2002-08 of the prognostic "CBR 1.5 scheme" + prognostic blulk Lopez micro-physics + Bechtold & Gueremy Shallow conv. schemes ; among others…)

1990 – 1991 Research scientist (writing of the non-linear Normal Mode Initialization in the new building ARPEGE-NWP model)

Teaching

2002-2005 Teaching courses on "physical parameterizations" and "Numerical methods" at the French School of Meteorology (master level).

1991-1993 Teaching a course on "Atmospheric energetics" at the French School of Meteorology (master level).