

Paolo Claudio Grigis – Curriculum Vitae



Paolo at the radioheliograph of the Nobeyama Observatory, Japan

Contact information

Paolo Grigis
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Born on XX-XX-XXXX in Locarno (TI)
Swiss citizen

Awards

2008: Winner of the ETH medal for outstanding doctoral dissertation.
2008: Winner of the prize of the Pro-Ticino society for best dissertation by a student from Ticino at ETH.
2003: Co-recipient of the NASA Group Achievement Award for RHESSI.

Education & Professional History

- 2009/09 - present, astrophysicist (trust fund employee), Harvard-Smithsonian Center for Astrophysics, Cambridge MA, USA
- 2007/09 - 2009/09, postdoctoral fellow, Harvard-Smithsonian Center for Astrophysics, Cambridge MA, USA
- 2006/11 - 2007/08, postdoc, ETH Zürich
- 2002/03 - 2006/11, doctoral student, ETH Zürich (Dissertation advisor: Prof. Arnold O. Benz)
- 2001/10 - 2002/02, teaching assistant, USI Lugano (Analysis course for economists, Prof. A. Frei)
- 1996/10 - 2001/09, student in physics, ETH Zürich (Diploma Thesis advisor: Prof. Jürg Fröhlich)
- 1995/07, summer school at CSCS Manno
- 1992/09 - 1996/06 student of Liceo Cantonale, Locarno, Switzerland
- 1994/07 internship, UBS Gordola
- 1993/07 internship, UBS Locarno
- 1992/07 internship, UBS Locarno

Work Experience

Paolo Grigis is a solar physicist with experience in data mining and analysis, numerical methods, theoretical modeling and mission operation. He has extensive knowledge of hard X-ray spectroscopy and imaging gained by working with RHESSI data at ETH, and experience in modeling of particle acceleration in solar flares. He is now a member of the instrument team of Hinode/XRT and has performed duties of mission operation (trained as XRT and TRACE planner). Paolo Grigis has experience in soft X-ray data analysis for Hinode/XRT and is very familiar with explorative data analysis and high-performance computing in IDL. Paolo Grigis is a co-investigator of the SDO computer vision project (PI: Petrus Martens,SAO) and his tasks include the preparation of an SDO flare list with data from AIA and EVE. He is also involved in an effort to characterize the point spread function of AIA and is working on image deconvolution tools.

His research interest include image processing, automated events and features recognition, modeling and simulating plasma physics and kinetics, particle acceleration, solar flares, microflares and nanoflares, scaling laws, coronal dynamics. Paolo Grigis has been closely involved with the *RHESSI*, *Hinode* and *Solar Dynamics Observatory* missions.

Paolo presented his scientific results at several meetings (meeting of the Solar Physics Division of the American Astronomical Society, meeting of the American Physical Society, meeting of the Swiss Society for Astronomy and Astrophysics, team meeting for the Hinode and RHESSI satellite, meeting of the European Geophysical Union, meeting of the Committee for Space

Research). Paolo is comfortable with speaking in public to small and large (few hundreds people) audiences.

Paolo Grigis has worked as teaching assistant for several undergraduate and graduate lectures in mathematics and physics at ETH Zurich between 1999 and 2007. Paolo also assisted Prof. A. Frei of USI Lugano in winter semester 2001/2002 for the lecture in analysis for economy students.

IT experience

Paolo Grigis has always been fascinated by the IT world. He developed his first computer program (that computed and displayed the Mandelbrot set) in 1994 in QBasic (DOS) right after he bought his first computer. During highschool he wrote many Turbo Pascal programs. During his studies at ETH he learned C++ for the lecture “Informatik I” and first became accustomed to UNIX systems. In 2002 Paolo started his PhD thesis and accumulated a large amount of practical experience in IDL (Interactive Data Language). IDL is a tool very similar to Matlab and Python, that allows interactive analysis of data as well as extensive analysis programs. IDL is widely used in the medical imaging, remote sensing, earth sciences and astronomy communities. Paolo’s library of IDL routines written for scientific data analysis currently consists of 777 routines with a total of 99330 lines of code. Paolo is a fast learner and can quickly pick up new languages and environments. Paolo has worked on Mac OS, GNU/Linux and Windows systems.

Language Skills

Paolo Grigis is fluent in English, German, Italian (mother language) and French.

Publication List

Link to the [list of publications](#).