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Date of birth : March 27th 1972

Nationality : french

Mother tongue : french

Married, 3 children (5, 3, 1 year old)

Astronomer

Research Interests

- Physics of very low mass stars, brown dwarfs and extrasolar planets
- Observational technics : adaptive optics, long baseline interferometry and radial velocities

Main results

- Adaptive optics and infrared interferometry observations of very low mass stars
- High contrast imaging of low mass star

Skills

- Image and signal processing : wavelets, Fourier, deconvolution
- Programming languages : C, Java, JavaBeans, Idl, Maple, Tcl/tk, Unix, html.
- Foreign languages : English, German

Current position

Physicist at Geneva Observatory.

- Project scientist deputy of the narrow angle astrometric instrument ESO/PRIMA/DDL.
- Science team member of the planet search astrometric survey, ESPRI.
- Science team member of the planet search radial velocity survey, SOPHIE.
- Work package manager of the Observation Preparation tools of ESO/PRIMA/DDL instrument
- Work package manager of the Astrometric Fitting Software (JR4)
- Member of the GAIA CU4 : responsible for the development of a genetic algorithm to search for planets in astrometric data.
- Coordinator of the NASA/SIM-GRID verification program for the southern hemisphere.
- Maintenance of the radial velocity database of the CORALIE instrument

Work history

January 2005 – Now: Physicist at Geneva Observatory.

July 2001–December 2004 : Post-doc at Geneva Observatory (Switzerland)

- ESA Science-team member of the GENIE instrument.

October 1998–June 2001 : Phd Thesis in Astrophysics at Grenoble Observatory, France

- Very low mass stars : multiplicity and mass luminosity relation
- Image processing from the Canada-France-Hawaii telescope adaptive optics system
- Data processing from the long baseline interferometer IOTA (Tucson, AZ)

- International collaboration between Grenoble Observatory (France), Geneva Observatory (Switzerland), Center for Astrophysics, Cambridge, USA

October 1998-June 2001 : Teaching assistant in computer science

August 1997-September 1998 : Visiting scholar at the Harvard-Smithsonian Center for Astrophysics (USA)

- Optical instrumentation, IR camera, signal processing on the stellar interferometer IOTA (Tucson, AZ)

January 1997-July 1997 : Engineer at Aérospatiale Space and Defense, Cannes, France

- Worked on the ESA project GAIA dedicated to global astrometry- Modelisation of the optical quality of the satellite and its interferometrical performances.

Academic

1998-2001 Phd in Astrophysics, The very low mass stars of the solar neighbourhood, Mass-Luminosity relations at l'Université Joseph Fourier (UJF), Grenoble, France

1993-1997 Magistère de physique" at l'Université Joseph Fourier (UJF), Grenoble, France

1995-1996 DEA "Astrophysique et Milieux Dilués" at l'Ecole Normale Supérieure de Lyon/UJF

1994-1995 Maîtrise de physique à l'Université de Californie de Santa Barbara, USA

1990-1994 DEUG & Licence de physique à l'UJF, France

1989-1990 Baccalauréat série C, France

Publications : The most 5 representative papers

[2006astro.ph..9059M](#) Montagnier, G.; Ségransan, D.; Beuzit, J. -L et al., Five new very low mass binaries

[2004A&A...427L...1F](#) Forveille, T.; Ségransan, D.; Delorme, P et al., An L0 dwarf companion in the brown dwarf desert, at 30 AU

[2003A&A...397L...5S](#) Ségransan, D.; Kervella, P.; Forveille, T.; Queloz, D. First radius measurements of very low mass stars with the VLTI

[2000A&A...364..665S](#) Ségransan, D.; Delfosse, X.; Forveille, T.; Beuzit, J.-L. et al. Accurate masses of very low mass stars. III. 16 new or improved masses

[2000A&A...364..217D](#) Delfosse, X.; Forveille, T.; Ségransan, D.; Beuzit, J.-L. et al. Accurate masses of very low mass stars. IV. Improved mass-luminosity relations

Invited talks

Fundamental Parameters of Low and Very Low Mass Stars Determined by Long-Baseline Interferometry , The power of optical/IR interferometry : Recent scientific results and second generation VLTI instruments, 4-8 April 2005

New Search Strategies, Toward other earths, Darwin/TPF and the search for extrasolar terrestrial planets, 22-25 April 2003

Astronomical journals and agencies Referee

Astrophysical Journal (1), Astronomy and Astrophysics (1), Monthly Notices of the Royal Astronomical Society (1), Astronomische Nachrichten (1)

Foreign referee to evaluate funding proposals for national agencies : ANR (2006, France)

Teaching and PhD supervision

Four lectures on Visibilities , Observability and UV-coverage and modelisation, at the EuroSummer School of Les Goutelas, *EuroSummer School – Observation data reduction with the Very Large Telescope Interferometer*, Goutelas (France), 4-16 June 2006.

Lecture on Interferometry at the doctoral school of the University of Geneva, Astronomy department, 2003.

Two lectures on Observability and UV-coverage at the EuroWinter School of Les Houches, *EuroWinter School – Observing the Very Large Telescope Interferometer*, Les Houches (France), 3-8 February 2002.

Lectures and practical work session in computer sciences applied to physics, 1998-2001

Co-supervisor of G. Montagnier PhD thesis (2004-). High contrast imaging of solar neighborhood low mass stars.

Scientific public outreach

Schools : Institut Education Motrice Association Paralysés de France, Eybens, France; Ecole de Collex ;

Personal interests

Reading, history.

Rock climbing, hiking, trekking, skiing.