

Alejandro Sáiz

Computational Astrophysicist

Education

1996-2003 **Ph.D. in Physics**, *Universidad Autónoma de Madrid*, Madrid, Spain.

Astrophysics Group, Theoretical Physics Department.

B.Sc. in Physics, Universidad Autónoma de Madrid, Madrid, Spain. 1991-1996

Specialty: Theoretical Physics.

Ph.D. thesis

title Galaxy Assembly in Self-Consistent Hydrodynamical Simulations:

Comparison with Observations

Prof. Rosa Domínguez Tenreiro supervisor

description Study on galaxy formation and evolution, focused on the results of cosmological, self-consistent,

numerical simulations including gravity and hydrodynamics, and the comparison of these results

with available observational data.

Work and Teaching Experience

10/2007-current Foreign Expert, Mahidol University, Bangkok, Thailand.

Faculty member at the Department of Physics, Faculty of Science.

Courses taught (undergraduate or graduate): Astrophysics, Classical Mechanics, Computational Physics, General Relativity, Graduate Seminar, Mathematical Methods for Physicists, Numerical Analysis, Solar Physics, Special Topics in Astronomy—Cosmic Rays, Thermodynamics and Statistical Mechanics. History of Science—History of Astronomy (Department of General Science, Faculty of Science, Chulalongkorn University, Bangkok). General Physics (International Double Degree Program, Department of Aerospace Engineering, Faculty of Engineering, Kasetsart University, Bangkok). Mathematics I—Linear Algebra (BSc in Actuarial Science, Department of Mathematics, Faculty of Science, Mahidol University, Bangkok).

10/2005-9/2007 Postdoctoral Researcher, Mahidol University, Bangkok, Thailand.

> Worked on computer simulations of solar energetic particle emission and transport, at the Space Physics and Energetic Particle Group, Department of Physics.

Participated in the setting up of the Princess Sirindhorn Neutron Monitor station.

Supported by the Mahidol University Postdoctoral Fellowship Program.

Postdoctoral Researcher, Chulalongkorn U. and Mahidol U., Bangkok, Thailand. 7/2003-9/2005

Supported by a Chulalongkorn University Research Unit and the Thailand Research Fund.

2/2003-6/2003 Profesor Ayudante Doctor (Assistant Professor), Theoretical Physics Department,

Universidad Autónoma de Madrid, Madrid, Spain.

2/2001–2/2003 **Profesor Ayudante (Lecturer)**, Theoretical Physics Department, Universidad Autónoma de Madrid, Madrid, Spain.

Taught undergraduate courses at different levels: General Physics Laboratory, Electromagnetism, Numerical Analysis, and Astrophysics.

12/2000–2/2001 **Profesor Asociado (Teaching assistant)**, *Theoretical Physics Department, Universidad Autónoma de Madrid*, Madrid, Spain.

Hired temporarily until the appointment for Profesor Ayudante was announced.

Grants

2/2012–1/2013 Thailand Center of Excellence in Physics (ThEP) Research Grant IGP/MU/2-RE3/12: Recording and Analyzing Cosmic Ray Data.

2008–2010 Research Grant for New Scholars from the Thailand Research Fund, Number MRG5180064: Analysis of Neutron Monitor Observations of Solar and Galactic Cosmic Rays.

1998–2000 Research Personnel Training Scholarship (FPI) from the Ministry of Education and Culture of Spain, associated to Project Number PB96-0029: Estudio de la Formación y Evolución de Galaxias en Diferentes Entornos y de la Estructura a Gran Escala del Universo.

1996–1997 Aid for Third Cycle, granted by Universidad Autónoma de Madrid, Spain, for starting the realization of a Ph.D. thesis.

Other

10/2008–current Associate Editor, Science Asia journal, Bangkok, Thailand.

Languages

Spanish Native

English Fluent

German Medium

Thai Basic

Publications

See http://orcid.org/0000-0001-7771-4341