

- Personal** **Name:** MANUEL LINARES ALEGRET.
Citizenship: Spanish.
Born: October 14th, 1980, in Barcelona, Spain.
- Contact** MIT – Kavli Institute for Astrophysics and Space Research
70 Vassar st. 37-582-D – 02139 – Cambridge – USA
Phone: +1 617-324-1194 **E-mail:** linares@mit.edu
Web: <http://space.mit.edu/~linares>
- Education** **Ph. D. in Astronomy**, 2005 - 2009.
Astronomical Institute, University of Amsterdam.
“Accretion states and thermonuclear bursts in neutron star X-ray binaries.”
- B. Sc. in Physics & M. Sc. in Astrophysics**, 1998 - 2004.
University of Barcelona. (Licenciatura en Física. Especialidad: Astrofísica.)
- Positions** **Rubicon Postdoctoral Fellow**, 2009 - 2011.
MIT – Kavli Institute for Astrophysics and Space Research.
Host: Prof. Deepto Chakrabarty.
- Ph. D. Position**, 2005 - 2009.
Astronomical Institute, University of Amsterdam.
Advisor: Prof. Michiel van der Klis.
- Research Internship**, 2004 - 2005.
Astronomical Institute, University of Amsterdam.
“Kilohertz quasi-periodic oscillations.”
Advisor: Prof. Michiel van der Klis.
- Research Training Position**, 2004.
Astronomy Department, University of Barcelona.
“Cosmological use of type Ia Supernovæ.”
Advisor: Prof. Ramón Canal.
- Awards** **Ph. D. Thesis** selected by the Spanish Astronomical Society as one of the top-three Spanish thesis in Astronomy & Astrophysics in the biennium 2008-2009.
- Rubicon Grant** awarded by the Physics division of the Netherlands organization for Scientific Research, 2009.
Taken at the MIT Kavli Institute for Astrophysics and Space Research.
- Grant** awarded by the Spanish Ministry of Education for outstanding undergraduate students to initiate scientific research, 2004.
Taken at the astronomy department of the University of Barcelona.
- Silver Medal** in the Spanish national competition in physics: “Olympic games of physics”, Ourense, Spain, 1998.

- Observing** **Selected awarded observations (PI):**
- ★ *High-resolution X-ray spectroscopy of the 11 Hz pulsar IGR J17480-2446. **Chandra**, AO-13, 2011. **100 ksec.***
 - ★ *A **Swift** study of neutron star transients between outburst and quiescence. **Swift**, Cycle 7, 2011. **60 ksec.***
 - ★ *Accretion disks in strong gravity: Fe lines vs. kHz QPOs and spectral states. **Suzaku**, AO-4, AO-5, 2009-2010. **200 ksec.***
 - ★ *XMM observation of IGR J00291+5934. **X-ray Multi-mirror Mission**, ToO, 2008. **30 ksec.***
 - ★ *WSRT observation of an accreting millisecond pulsar in outburst: IGR J00291+5934. **Westerbork Synthesis Radio Telescope**, ToO, 2008. **36 ksec.***
 - ★ *Swift observations of neutron star transients. **Swift**, 2007-2009, four ToO programs for a total of **70 ksec.***
 - ★ *Extended timing observations of the accreting millisecond pulsar IGR J00291+5934. **Rossi X-ray Timing Explorer**, AO-11, 2006. **400 ksec.***
- Funding** **Awarded research funding (PI):**
- ★ *Accretion disks in strong gravity: Fe lines vs. kHz QPOs and spectral states. **Suzaku**, AO-5, 2010. **USD 35,000.***
 - ★ *A **Swift** study of neutron star transients between outburst and quiescence. **Swift**, Cycle 7, 2011 (pending). **USD 15,000.***
 - ★ *The GBM all-sky X-ray burst monitor. **Fermi**, Cycle 4, 2011 **USD 160,000.***
 - ★ *High-resolution X-ray spectroscopy of the 11 Hz pulsar IGR J17480-2446. **Chandra**, Cycle 13, 2011 (pending). **USD 50,600.***
- Professional**
- Member** of the American Astronomical Society, 2011.
 - Reviewer** in the time allocation committee of NASA's *Swift* (Cycles 6 & 7) and *RXTE* (Cycle 15) observatories (2009-2010).
 - Referee** for *ApJ*, *A&A* and *MNRAS* (2007-present).
 - Member** of the scientific and local organizing committee of the workshop "A decade of accreting millisecond X-ray pulsars", held in Amsterdam in April 2008.
 - Co-editor** of the proceedings of the workshop "A decade of accreting millisecond pulsars", held in Amsterdam in April 2008 (*AIP Journals*).
- Conferences**
- HEAD meeting. Newport, RI, September 2011.
 - Talk:** "Thermonuclear bursts from Terzan 5: a showcase of burning regimes"
 - Physics of Neutron Stars. St. Petersburg, Russia, July 2011.
 - Talk:** "On the cooling tails of thermonuclear X-ray bursts: News from Terzan 5."
 - The X-ray Universe. Berlin, Germany, July 2011.
 - Talk:** "Thermonuclear bursts on Neutron Stars: News from Terzan 5."
 - AAS 218-meeting. Boston, MA, May 2011.
 - Talk:** "On the cooling tails of thermonuclear bursts."
 - MAXI workshop. Tokyo, Japan, December 2010.
 - Talk:** "The Fermi-GBM X-ray burst monitor."

IAU general assembly. Rio de Janeiro, Brazil, August 2009.

Talk: “Accretion states of neutron stars: luminosity, variability and spectra.”

A decade of accreting millisecond pulsars. Amsterdam, The Netherlands, April 2008.

Talk: “Timing the accretion flow around AMPs.”

Astrophysics of compact objects. Huangshan, China, July 2007.

Talk: “Accretion states of accreting neutron stars.”

Compact objects and their explosive progenitors. Cefalù, Italy, June 2006.

Talk: “Accreting millisecond pulsars: X-ray variability from fast spinning neutron stars and their surroundings.”

Invited Columbia Astrophysics Laboratory, New York, February 2009.

Seminar: “Accretion states of neutron stars”.

Harvard-Smithsonian Center for Astrophysics, Cambridge, January 2009.

HEAD talk: “X-ray variability in neutron star LMXBs”.

NASA-NSSTC/MSFC, Huntsville, January 2009.

Space science colloquium: “Type I X-ray bursts in hard X-rays”.

McGill University, Montreal, January 2009.

Astrophysics seminar: “Accreting neutron stars”.

Teaching **X-ray timing techniques.** Hands-on session.

1st. school on multi-wavelength BH astronomy. University Paris Diderot, 2009.

Super-orbital variability in X-ray binaries. Supervisor.

M. Sc. research project (A. Tol), University of Amsterdam, 2008.

Astrophysics of compact stars. Galaxies. Solar system. Teaching assistant.

Second & Third year B. Sc. courses, University of Amsterdam, 2008.

Astronomy practicum. Project supervisor: “Optical spectroscopy of Arcturus”.

Third year B. Sc. course, University of Amsterdam, 2007.

Analysis **RXTE, Swift, Chandra, XMM, INTEGRAL, Fermi, Suzaku:** Wide experience in imaging, spectral and timing analysis with these high-energy instruments. Fermi-LAT analysis workshop (January 2010); Fermi-GBM analysis training at UAH & NASA-MSFC. Trained use of scientific software: Ftools, Xspec, Xselect, Ximage, Xronos. Basic knowledge of ISIS, IRAF and AIPS.

Programming **Perl, awk, tc-shell, tcl (Xspec scripting):** Proficient use.

Fortran, C, Assemb., HTML, Mathematica, IDL: Intermediate knowledge.

Languages **Spanish, Catalan:** Native command.

English, Italian: Proficient use.

French, Dutch: Intermediate knowledge.