Michael R. García
garcia@cfa.harvard.edu
hea-www.harvard.edu/~garcia

Education and Professional Affiliation

MIT B.S. Earth and Planetary Sciences, 1978
Harvard University M.S., Ph.D. Astronomy, 1987
Member: American Astronomical Society(AAS), Society of Photo-Optical Instrumentation Engineers(SPIE); Citizenship:US

Roles

Leading Scientist on National and International Space Observing Technology & Missions
Smithsonian Astrophysical Observatory (SAO) Science Lead for the International X-Ray Observatory, $3 billion proposal for joint NASA/ESA flagship mission
Principal Investigator for the Extreme Physics Explorer, $780 million NASA concept
Mission Planning Scientist, Chandra X-Ray Observatory, $2.5 billion NASA mission

Einstein Observatory Project Scientist
Supervised 20 scientists/engineers/technicians and $2 million/year budget

Chandra High Resolution Camera Mission Scientist
Designed, carried out, and published experiments on this micro-channel plate imager

Principal Investigator on over $1.7 million in research grants from NASA, SI, & NSF
Wrote, acquired, managed, & completed grant-funded research in astrophysics

Project and Systems Architect
Science Requirements (Level 0, 1, 2) and documents for new missions
Pseudo-code and prototyping for operations software

Leading Advocate for cornerstone missions at Smithsonian Astrophysical Observatory
Pitched projects to lead universities and NASA headquarters

Founder and Lead Scientist International Student Astrophysics Exchange
Southampton University/SAO Master in Astrophysics with a Year Abroad

Positions

Astrophysicist, Smithsonian Astrophysical Observatory (SAO), 1987-present

Supporting Skills

Modeling, analysis, and simulation of image, timing, and spectroscopic datasets; statistical tests
Experiment design, execution, completion, and documentation
Space mission design and optimization, studies of mission trade space
Proposal Preparation, including science, technologies, and budgets to NASA and Smithsonian
X-ray detector and optics design and development
Strong presentation skills: over 400 professional publications, numerous talks/presentations, press releases, TV shows, Smithsonian Museum Traveling Exhibits.
Mentoring: 6 post-docs, 6 Masters Astrophysics students
Leadership: Chair SAO Scientists Council, chair Science Organizing Committees for science conferences, publications editor, scientific publications referee, NASA/NSF/SI proposal reviewer
Fluent with Fortran, UNIX, Windows, S-Plus/R, Knowledge of IDL, MATLAB