

Gary Allan MAMON

Institut d'Astrophysique de Paris (IAP)

Email: gam@iap.fr

WWW: <http://www.iap.fr/users/gam>

French citizen

Born 7 February 1958 in New York (USA)

Married, 3 children

PRINCIPAL POSITIONS

- 1993– **Institut d'Astrophysique (IAP)**, Paris, FRANCE.
Distinguished Astronomer (“*classe exceptionnelle*”) since 2017 (promoted to 2nd level in 2022), associated with Sorbonne Université (*Astronome-adjoint 2nd class* until 1994, *Astronome-Adjoint 1st class* 1994-2000, *Astronome 2nd class* 2000-2010, *Astronome 1st class* 2010-2018). Sabbatical at Oxford (2008–2009).
- 1990– **Observatoire de Paris-Meudon**, Meudon, FRANCE.
1993 *Astronome Adjoint 2nd class* (with tenure) at the DAEC department.
- 1985– **New York University**, New York, NY, USA.
1988 *Assistant Research Scientist* at the Department of Physics. *Adjunct Faculty* from 1987.

EDUCATION

- July **Université Paris 6** (now **Sorbonne Université**), Paris, FRANCE
2000 *Habilitation*. Thesis: Statistiques des interactions dans l'Univers : des molécules aux galaxies.
- 1979– **Princeton University**, Princeton, NJ, USA.
1985 Ph.D. in Astrophysical Sciences, June 1985. Thesis: Compact Configurations within Small Evolving Groups of Galaxies.
- 1977– **Massachusetts Institute of Technology**, Cambridge, Mass, USA.
1979 S.B. in Physics, June 1979. Thesis: A Study of the Solar Variability.

HONORS

Elected to the *Sigma Xi* society of scientists and engineers (1979). *Thaw Fellow* (1979-1980). Member of the *American Astronomical Society* (since 1985) and the *French Astronomical Society (SF2A)* (since 1993). Bibliographic notes published in the *Marquis Who's Who in Science & Engineering* (since 1994) and the *Marquis Who's Who in the World* (since 1999). 2nd most acknowledged French astronomer in 1995 in the major astronomical publications (A&A, A&AS, ApJ, ApJL, ApJS, AJ, MNRAS) (according to the compilation available at <http://www.pa.uky.edu/~verner/aai.html>). *Bonus for doctoral supervision and research* (1999–2003; 2003–2007; 2008–2012; 2013–2016; 2016–2020).

MAIN RESPONSIBILITIES

Head of *DENIS* extragalactic team (1991–2002) and of the *IAP* cosmology & galaxies team (up to 23 faculty, 2000–2005). Member of the Astronomy section of the *French National University Council (CNU)* (1995–1999), the *French National Scientific Council (CNRS)* (2000), and the *French Council of Astronomers and Physicists (CNAP)* (2001–2003). Head of the *HyperLeda* review committee (2006). Member of scientific councils of French national cosmology (GdR Cosmologie 1991–1997) and galaxies (PNG 2005–2008) networks, and of IAP (2007–2014). Responsible of Euclid processing function for cluster structural parameters (2015–). Head of science *Theia* astrometric mission submitted to ESA-M5 (2016-17) and M7 (2022). External referee for two 300-night and one 175-night observing proposals on 4m telescopes and for numerous grants (up to 1MEuro). Referee for 79 articles submitted to the journals *A&A*, *MNRAS*, *ApJ*, *ApJL*, *AJ*, *Science*, *Nature Astronomy*, *JCAP*, *General Relativity & Gravitation*, and *EuroPhysLett*. Main organizer of 5 international meetings. Member of 43 Ph.D. and habilitation thesis committees (president in 7; reader in 19).

PUBLICATIONS

157 articles published in peer-review international journals (24 as 1st author and 48 as 2nd author), among which *MNRAS* (77), *A&A* (37), *ApJ* (13), *ApJLett* (6), *A&ASup* (3), *Nature* (1) and *Rev Mod Phys* (1). 104 published contributions in international conferences, including a conference summary, 20 reviews and invited long talks (16 as 1st author), 5 refereed, and 6 other invited contributions. Unpublished conference talks, including 3 summaries and 9 invited reviews. These articles and proceedings led to nearly 8800 citations (1750+ as 1st author and 2300+ as 2nd author). Principal editor of the *2nd DAEC meeting: Distribution of Matter in the Universe* (1992), *XVIIth Moriond Astrophysics Meeting: Extragalactic Astronomy in the Infrared* (1997), and *XXIst IAP meeting: Mass profiles and shapes of cosmological structures* (2006).

STUDENTS

Principal supervision of 9 Doctoral students and 23 2nd-year Masters students. Active secondary supervision of 16 other Doctoral students.

TEACHING

Lectures in following courses: *Electromagnetism* (3rd-year undergrad, 1988), *Astronomy for Journalists* (undergrad, 1988); *Gravitational Dynamics of N-Body Systems* (2nd-year Masters, 2000–2009), *Dynamics of Extended Bodies and Galaxies* (1st-year Masters, 2021-). Recitations in numerous undergrad courses in Physics and Mathematics.

SELECTED PUBLICATIONS

- 2021 Vitral & **Mamon**, *A&A* 646, A63, Does NGC 6397 contain an intermediate-mass black hole or a more diffuse inner subcluster? (21 citations)
- 2020 **Mamon**, Trevisan, Thuan et al., *MNRAS* 492, 1791, The frequency of very young galaxies in the local Universe - II. The view from SDSS spectra (10 citations)
- 2019 **Mamon**, Cava, Biviano et al., *A&A* 631, A131, Structural and dynamical modeling of WINGS clusters. II. The orbital anisotropies of elliptical, spiral, and lenticular galaxies (20 citations)
- 2013 **Mamon**, Biviano, & Boué, *MNRAS* 429, 3079, MAMPOSSt: Modelling Anisotropy and Mass Profiles of Observed Spherical Systems - I. Gaussian 3D velocities (115 citations)
- 2013 Wojtak & **Mamon**, *MNRAS* 428, 2407, Physical properties underlying observed kinematics of satellite galaxies (70 citations)
- 2012 Silk & **Mamon**, *RAA* 12, 917, The current status of galaxy formation (205 citations)
- 2011 Cattaneo, **Mamon**, Warnick, & Knebe, *A&A* 533, A5, How do galaxies acquire their mass? (65 citations)
- 2010 **Mamon**, Biviano & Murante, *MNRAS* *A&A* 520, A30, The universal distribution of halo interlopers in projected phase space. Bias in galaxy cluster concentration and velocity anisotropy? (79 citations)
- 2005 **Mamon** & Lokas, *MNRAS* 363, 705, Dark matter in elliptical galaxies - II. Estimating the mass within the virial radius (205 citations)
- 2005 Dekel, Stoehr, **Mamon**, Cox, Novak, & Primack, *Nature* 437, 707, Lost and found dark matter in elliptical galaxies (172 citations)
- 2003 Lokas & **Mamon**, *MNRAS* 343, 401, Dark matter distribution in the Coma cluster from galaxy kinematics: breaking the mass-anisotropy degeneracy (217 citations)
- 2001 Lokas & **Mamon**, *MNRAS* 321, 155, Properties of spherical galaxies and clusters with an NFW density profile (242 citations)
- 1992 **Mamon**, *ApJ* 401, L3, Are cluster ellipticals the products of mergers? (83 citations)
- 1988 **Mamon**, Glassgold, & Huggins, *ApJ* 328, 797, The photodissociation of CO in circumstellar envelopes (275 citations)
- 1986 **Mamon**, *ApJ* 307, 426, Are compact groups of galaxies physically dense? (147 citations)
- 1982 Binney & **Mamon**, *MNRAS* 200, 361, M/L and velocity anisotropy from observations of spherical galaxies, or must M87 have a massive black hole? (409 citations)