Curriculum Vitae of Françoise COMBES

Prof at College de France (Galaxies & Cosmology) Member of Academy of Sciences Observatoire de Paris (LERMA) 61 Av. De l'Observatoire, F-75014, Paris, FRANCE

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Studies:

1980: PhD Thesis, Univ. Paris VII: " Dynamics and structure of galaxies " 1975: Agregation of Physics (rank 2nd) 1974-5: Thesis of 3rd cycle, (Paris VII): Conditions of nucleosynthesis in a symmetric universe of matter-antimatter 1971-75: Ecole Normale Supérieure (Rue d'Ulm), PARIS

Role in the project:

Observations of the molecular component in galaxies, at low and high redshift. Estimation of the star formation efficiency, and the influence of environment in the quenching. Dynamical modeling of the quenching processes.

Expertise:

- Formation and evolution of galaxies
- Dynamics of galaxies, Interstellar medium
- High redshift galaxies -- Dark matter in the Universe

Professional Experience:

- * 2014-: Professor at College de France: Chair Galaxies & Cosmology
- * 2007-2014: Astronomer (Classe Exceptionnelle) at Paris Observatory (CE2 en 2011)
- * 1989-2006: Astronomer (2nd, then 1^{cl}) at Paris Observatory
- * 1985-1989: Staff-director of the Physics Laboratory in Ecole Normale Supérieure (Ulm), Paris
- * 1983-1985: Part-time lecturer in Paris 6 (C4 and DEA)
- * 1975-1985: Assistant then Maître-Assistant in Ecole Normale Supérieure, Paris

Committees and Functions:

- * 2016-: Chair of Section Universe Sciences of Académie des Sciences
- * 2009-2016: President of COFUSI
- * 2003-2018: Scientific Editor of A&A (Astronomy & Astrophysics main European Journal)
- * 2002-2004: President of SF2A (French National Astrophysical Society)
- * 2007-2008: Chair of PanelD Astronet Roadmap
- * 2012-2015: President Division J (Galaxies & Cosmology) of IAU
- * 2009-2016: Member Committee ERC-Astrophysics (PE9)
- * 2010-2012: Chair of Committee ANR-Astrophysics
- * 2011-2014: Chair of the ALMA Program Committee * 2012-: Chair of ESO-OPC

Publications: ~ 1041 (508 in refereed journals), >22 800 citations (hindex=73) from NASA-ADS

- *Salomé, O., Salomé, P., Miville-Deschenes, M.-A., Combes, F., Hamer, S: 2017, Inefficient jet-induced star formation in Centaurus A: High resolution ALMA observations of the northern filaments, A&A 608, A98
- *Melchior, A., Combes, F.,: 2017, Exhaustion of the gas next to M31's supermassive black hole, A&A 607, L7
- *Oosterloo, T., Oonk, J.B.R., Morganti, R., Combes, F., et al., C., 2017, Properties of the molecular gas in the fast outflow in the Seyfert galaxy IC 5063, A&A 608, A38
- *Garcia-Burillo, S., Viti, S., Combes, F., et al. 2017, ALMA imaging of C2H emission in the disk of NGC1068, A&A, 608, A56
- *Jachym, P., Sun, M., Kenney, J.D.P., Cortese, L., Combes, F., et al.:: 2017, Molecular Gas Dominated 50 kpc Ram Pressure Stripped Tail of the Coma Galaxy D100, ApJ, 839, 114

Books: * La Matière Noire, clé de l'Univers, 2015, F. Combes, Vuibert

- * La Voie Lactée, 2013, F. Combes & J. Lequeux, EdP-Sciences
- * Galaxies et Cosmologie (2009), F. Combes, M. Haywood, S. Collin, F. Durret, B. Guiderdoni (Ellipses)
- * Mystères de la formation des galaxies (2008), F. Combes (Dunod) | Mysteries .. (2010, Springer)
- * Galaxies et Cosmologie (CNRS,1991), -- Galaxies and Cosmology (Springer, 1995), avec P. Boissé, A. Mazure et A. Blanchard, ré-édition en 2002