Curriculum Vitæ

Name:	**Manuela Magliocchetti**
Date of birth:	15th November 1969
Place of birth:	Rome, Italy
Nationality:	Italian
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Academic Record

2009-: **Ricercatore Astronomo (permanent, equivalent to lecturer position)**
INAF-IFSI, Rome, Italy.

2005-2009: **Ricercatore Astronomo**
INAF, Osservatorio Astronomico di Trieste, Italy.

2006-2008: **Visiting Associate**
ESO, Garching, Germany.

2001-2005: **Advanced Fellow (Ricercatore a contratto)**
International School for Advanced Studies (SISSA), Trieste, Italy.

1999-2001: **Postdoctoral Position**
International School for Advanced Studies (SISSA), Trieste, Italy.

1996-1999: **Ph.D. in Astronomy and Astrophysics**
Institute of Astronomy and New Hall College, Cambridge, U.K.
Thesis title: *Large-Scale Clustering at High Redshift*,
Supervisors: Professor J.V.Wall, Dr. O.Lahav & Dr. S.J.Maddox.

Awards: Isaac Newton Scholarship for 1996-1999.
New Hall College Grants for 1996-1997 and 1997-1998.

1995-1996: **Master in Physics (corso di perfezionamento)**
University "La Sapienza", Rome, Italy.

1988-1995: **Undergraduate Degree in Physics**
University "La Sapienza", Rome, Italy
Graduated with 110/110 (full mark)
Thesis title: *Secular Stability of Anisotropic Stellar Systems*,
Supervisors: Professor R.Ruffini & Dr. G.Pucacco.

Research Areas

Large-Scale Structure (theory/observations):
Cosmological perturbations. Power spectrum. Moments of galaxy distribution. Clustering. Biased galaxy clustering and time evolution. Relationship between galaxy clustering and number counts. Temperature anisotropies due to galaxy distribution.

Galaxy formation/evolution (theory/observations):

Luminosity functions and number counts in different wavebands as tests for both cosmology and galaxy formation models. Relationship between galaxy formation and large-scale properties: star-forming vs early-type galaxies. Clustering strength as probe of star-formation rate. Predictions for density fluctuations originating from different galaxy populations. Effects of the emission from Population 3 galaxies on the observed NIR background and its fluctuations. The issue of the Halo Occupation Distribution for galaxies of different spectral type and quasars. Obscured star-formation and AGN activity as revealed by *Spitzer* observations at $z \sim 2$: masses, radio properties and evolutionary connections between the tho populations.

Active Galactic Nuclei (theory/observations):

The nature of faint radio sources: AGN vs star-burst populations. Optical photometry and spectroscopy. Redshift determination. Cosmological evolution of radio sources: models vs observations. Number counts, luminosity functions and redshift distribution. Clustering properties of radio sources. Radio sources as biased tracer of the dark matter distribution. Morphological properties of the hosts. Large-scale properties of radio sources as measure of their duty-cycle. Radio-quiet vs radio-loud QSO: black hole masses, degree of cosmological evolution and connections between the two populations. Cosmological evolution of the optical quasar population up to $z \sim 4$. Effects of extended radio activity on the thermal properties of clusters of galaxies. Radio emission as a function of environment.

Galactic Dynamics (theory):

Velocity dispersions. Models for dynamical and gravothermal instability at the very early stages of spherical self-gravitating systems such as globular clusters. Formation of core: isotropic vs anisotropic case.

Work related with the Planck Surveyor Experiment (theory):

Study of the expected level of contamination to CMB signal originating from extra-galactic foregrounds of different nature. Predictions for clustering and temperature anisotropies due to extra-galactic sources in different wavebands and different cosmologies. Analysis of contribution from different populations.

Bibliography

1 Publications in Refereed Journals

1. *Gravothermal catastrophe in anisotropic systems.*
Magliocchetti M., Pucacco G., Vesperini E., 1997; IL NUOVO CIMENTO, 112B, N.2-3, 423.

2. *Variance and skewness in the FIRST survey*
Magliocchetti M., Maddox S.J., Lahav O., Wall J.V., 1998; MNRAS, 300, 257.

3. *Gravothermal catastrophe in anisotropic spherical systems.*
Magliocchetti M., Pucacco G., Vesperini E., 1998; MNRAS, 301, 25.

4. *Constraints on the clustering, biasing and redshift distribution of radio sources.*
Magliocchetti M., Maddox S.J., Lahav O., Wall J.V., 1999; MNRAS, 306, 943.

5. *The redshift evolution of clustering in the HDF.*
Magliocchetti M., Maddox S.J., 1999; MNRAS, 306, 988.

6. *The observed evolution of galaxy clustering vs. epoch-dependent biasing models.*
Magliocchetti M., Bagla J., Maddox S.J., Lahav O., 1999; MNRAS, 314, 546.

7. *The redshift distribution of FIRST radio sources at 1 mJy.*
Magliocchetti M., Maddox S.J., Wall J.V., Benn C.R., Cotter G., 2000; MNRAS, 318, 1047.

8. *Theoretical predictions on the clustering of SCUBA galaxies and implications for small-scale fluctuations at sub-mm wavelengths.*
Magliocchetti M., Moscardini L., Panuzzo P., Granato G.L., De Zotti G., Danese L., 2001; MNRAS, 325, 1553.

9. *Radio properties of FIRST radio sources at 1 mJy.*
Magliocchetti M., Celotti A., Danese L., 2002; MNRAS, 329, 377.

10. *Optical identifications of* ~ 4000 *radio sources at the 1 mJy level.*
Magliocchetti M., Maddox S.J., 2002; MNRAS, 330, 241.

11. *The 2dF Galaxy Redshift Survey: the population of nearby radio galaxies at the 1 mJy level.*
Magliocchetti M., Maddox S.J., Jackson C.A., + 2dFGRS team, 2002; MNRAS, 333, 100.

12. *Predictions for statistical properties of forming spheroidal galaxies.*
Perrotta F., **Magliocchetti M.**, Baccigalupi C., Bartelmann M., De Zotti G., Granato G.L., Silva L., Danese L., 2003; MNRAS, 338, 623.

13. *The radio-loud/radio-quiet dichotomy: news from the 2dF-QSO Survey.*
Cirasuolo M., **Magliocchetti M.**, Celotti A., Danese L., 2003; MNRAS, 341, 993.

14. *First Stars Contribution to the Near Infrared Background Fluctuations* .
Magliocchetti M., Salvaterra R., Ferrara A., 2003; MNRAS, 342, L25.

15. *Evidence for anisotropy in the distribution of short-lived gamma-ray bursts.*
Magliocchetti M., Ghirlanda G., Celotti A., 2003, MNRAS, 343, 255.

16. *The halo distribution of 2dF galaxies.*
Magliocchetti M., Porciani C., 2003; MNRAS, 346, 186.

17. *Is there a dichotomy in the radio-loudness distribution of quasars?.*
Cirasuolo M., Celotti A., **Magliocchetti M.**, Danese L., 2003; MNRAS, 346, 447.

18. *The 2dF Galaxy Redshift Survey: clustering properties of radio galaxies.*
Magliocchetti M. et al. (2dFGRS Team), 2004; MNRAS, 350, 1485.

19. *Confusion noise at far-IR to millimiter wavelengths.*
Negrello M., **Magliocchetti M.**, Moscardini L., De Zotti G., Granato G.L., Silva L., 2004; MNRAS, 352, 493.

20. *Cosmic evolution of quasar clustering: implications for the host haloes.*
Porciani C., **Magliocchetti M.**, Norberg P., 2004; MNRAS, 355, 1010.

21. *Faint radio-loud quasars: clues on their evolution.*
Cirasuolo M., **Magliocchetti M.**, Celotti A., 2005; MNRAS, 357, 1267.

22. *Effect of clustering on extragalacitc source counts with low-resolution instruments.*
Negrello M., Gonzalez-Nuevo J., **Magliocchetti M.**, Moscardini L., De Zotti G., Toffolatti L., Danese L., 2005; MNRAS, 358, 869.

23. *The role of black hole mass in quasar radio activity.*
Metcalf R.B., **Magliocchetti M.**, 2006; MNRAS, 365, 101.

24. *The large scale clustering of radio sources.*
Negrello M., **Magliocchetti M.**, De Zotti G., 2006; MNRAS, 368, 935.

25. *The infrared glow of first stars.*
Salvaterra R., **Magliocchetti M.**, Ferrara A., Schneider R., 2006; MNRAS, 368, L6.

26. *On the correlation of Short Gamma-Ray Bursts and Clusters of galaxies.*
Ghirlanda G., **Magliocchetti M.**, Ghisellini G., Guzzo L., 2006; MNRAS, 368, L20.

27. *On the radio properties of the highest redshift quasars.*
Cirasuolo M., **Magliocchetti M.**, Gentile G., Celotti A., Cristiani S., Danese L., 2006; MNRAS, 371, 695

28. *A highly obscured strongly clustered galaxy population discovered with the Spitzer Space Telescope.*
Magliocchetti M., Silva L., Lapi A., De Zotti G., Granato G.L., Fadda D., Danese L., 2007; MNRAS, 375, 1121

29. *The interplay between radio galaxies and cluster environment*
Magliocchetti M., Brüggen M., 2007; MNRAS, 379, 260

30. *The radio properties of optically obscured Spitzer sources.*
Magliocchetti M., Andreani P., Zwaan M., 2008; MNRAS, 383, 479

31. *On the evolution of clustering of 24μm-selected galaxies.*
Magliocchetti M., Cirasuolo M., McLure R.J., Dunlop J.S., Almaini O., Foucaud S., De Zotti G., Simpson C., Sekiguchi K., 2008; MNRAS, 383, 1131

32. *MAMBO observations at 240GHz of optically obscured Spitzer sources: source clumps and radio activity at high redshift.*
Andreani P., **Magliocchetti M.**, De Zotti G., 2010, MNRAS, 401, 15

MNRAS = Monthly Notices of the Royal Astronomical Society