







# Mauro Orlandini


## Senior Researcher


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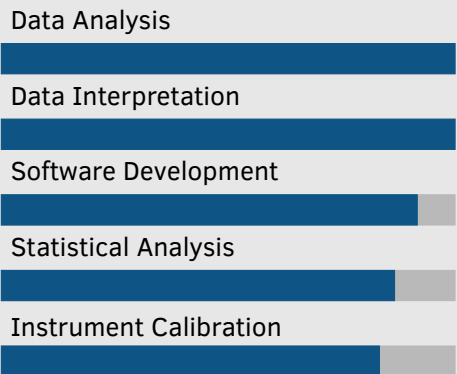
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## Skills



(\*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

## About Me

I have always worked on high energy astrophysics: my PhD thesis at SISSA, Trieste, dealt with interacting binary systems. After a postdoc at NASA/GSFC, I was involved in the calibration of the high energy experiment PDS aboard the BeppoSAX satellite, and then in its data exploitation. Since then I work at the Astrophysics and Space Science Observatory (formerly TeSRE and IASF) in Bologna, Italy, analyzing X-ray data from celestial sources (mainly compact galactic objects), developing software for data analysis, and participating in the development of present and future high energy missions, like HXMT, LOFT, eXTP, THESEUS, ASTENA.

## Education

1990	Ph.D. in Astrophysics <i>Time Properties of Two Wind-Fed X-ray Binary Pulsars Observed with EXOSAT: 4U 1538-52 and GX 301-2.</i>	SISSA/ISAS Trieste, Italy
1988	M.Sc. in Astrophysics <i>Theory and Observations of X-Ray Pulsars in Binary Systems.</i>	SISSA/ISAS Trieste, Italy
1985	<i>Laurea</i> in Physics magna cum laude <i>The Magnetic Monopole: A Cosmological problem</i>	Ferrara University

## Selected Publications

2022	Kong L.D., et al. <i>Phase Dependent Evolution within Large Luminosity Range of 1A 0535+262 Observed by Insight-HXMT during 2020 giant outburst.</i> ApJ 932, 106
2021	Liu J., et al. <i>Disc versus Wind Accretion in X-ray Pulsar GX 301-2.</i> MNRAS 504, 2493
2021	Maiolino T., et al. <i>Comptonization as an Origin of the Continuum in Intermediate Polars.</i> ApJ 911, 80
2021	Li J., et al. <i>X-ray Reprocessing in Accreting Pulsar GX 301-2 Observed with Insight-HXMT.</i> MNRAS 501, 2522
2020	Maiolino T., et al. <i>Testing Comptonization as the Origin of the Continuum in Nonmagnetic Cataclysmic Variables. The Photon Index of X-ray Emission.</i> ApJ 900, 153
2019	Maiolino T., et al. <i>Red-skewed K<math>\alpha</math> Iron Lines in GX 13+1.</i> A&A 625, A8
2015	Orlandini M., et al. <i>Probing Stellar Winds and Accretion Physics in High-Mass X-ray Binaries and Ultra-Luminous X-ray Sources with LOFT.</i> LOFT White Paper, arXiv:1501.02777
2012	Orlandini M., et al. <i>BeppoSAX Observations of The X-ray Pulsar MAXI1409-619 in Low State: Discovery of Cyclotron Resonance Features.</i> ApJ 748, 86
2006	Orlandini M. <i>Broad-band Spectral Properties of Accreting X-ray Binary Pulsars.</i> Adv. Space Res. 38, 2742
1998	Orlandini M., et al. <i>BeppoSAX Observation of 4U1626-67: Discovery of an Absorption Cyclotron Resonance Feature.</i> ApJ Lett. 500, L165
1997	Costa E., et al. <i>Discovery of the X-ray Afterglow of a Gamma-ray Burst with BeppoSAX.</i> Nature 387, 783

## Working Experience

Since 2006	Senior Researcher	INAF/OAS Bologna
2001-2006	Researcher	CNR/IASF Bologna
1993-2001	Postdoc ex. Art.36	CNR/TeSRE Bologna
1991-1992	NRC Fellowship Postdoc	NASA/GSFC Greenbelt, MD (USA)

## Teaching Experience

Since 2010	Temporal Data Analysis: Theory and Procedures for the Ph.D. courses	Ferrara University
2004-2009	High Energy Astrophysics for the <i>Laurea Specialistica</i> courses	Ferrara University