
WORK EXPERIENCE

January 2015 to present

Postdoctoral fellow

"Enrico Fermi" Centre MARBILab, c/o Fondazione Santa Lucia Roma - Italy

Magnetic resonance images processing, statistical and network analysis of cerebral patterns alterations induced by metabolic diseases, such diabetes, and cognitive load, as elicited by functional BOLD, perfusion and DTI. Simultaneous EEG-fMRI processing and analysis of the mutual (electrical signals/functional images) influences before and during mild sedation.

Business or Sector Data analysis, statistics, computer coding.

January-December 2014

Postdoctoral fellow

Weizmann Institute of Science, Rehovot, Israel

Images processing and statistical analysis based on descriptive and inferential statistic, machine learning, statistical mechanics tools of functional magnetic resonance images to evaluate connectivity patterns in the brain to foreseen connectivity disorders.

Business or Sector Data analysis, statistics, computer coding.

February-December 2013

Postdoctoral fellow

Edmund & Lili Safra Center for Brain Science at the Interdisciplinary Center for Neural Computation - Hebrew University of Jerusalem, Israel

Statistical processing of signal as neuron spiking in the brain, descriptive and inferential statistical analysis, machine learning and statistical mechanics of the firing rate of single neurons to find the neural correlates to the behavior and in the light of these new neural/behavior connections to investigate how recent history effects the present.

Business or Sector Data analysis, statistics, computer coding.

September 2010-August
2012**Postdoctoral fellow**

Beverly Sackler School of Astronomy, Tel Aviv University, Israel

Statistical analysis of spectroscopic and photometric data obtained by Herschel/PACS, mathematical computational modeling of AGN and starburst emission processes in LINERs to investigate the reciprocal influence on evolution.

Business or Sector Data analysis, statistics, computer coding.

**EDUCATION AND
TRAINING**November 2006-January
2010**Doctor of Philosophy**

Dottorato di Ricerca in Astrofisica (PhD). XXII Cycle at "La Sapienza" University of Rome, dept. of Physics, Italy.

Spectroscopic signal processing, descriptive statistical analysis and mathematical computational modeling of a complete sample of Seyfert galaxies

October 2000-May 2006

Master of Science

Laurea (M. Sc.) in Physics at "La Sapienza" University of Rome, dept. of Physics, Italy.

Project and realization of an optical photometer based on lock-in amplification.

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
German	C1	C1	C1	C1	C1
Spanish	B1	B1	B1	B1	B1
Hebrew	B1	B1	B1	B1	A1

I gained competence in mastering English through several experiences abroad, such as working periods in scientific laboratories or study trips during teenagehood and early twenties.

I learned German at school, from 11 to 19, and later improved it through study trips and short visits.

I attended Spanish classes while living in Barcelona and later in my hometown.

I attended Hebrew classes while living in Tel Aviv.

Communication skills

Good communication skills gained through my experience in many laboratories in several countries.

Organizational / managerial skills

- Independence - I worked on selected parts within major projects.
- Flexibility - I worked in several environments and on multiple kinds of dataset.
- Event organization - I organized the Post Doc's Seminars in the Edmund & Lily Safra Center for Brain Studies – Hebrew University of Jerusalem and helped in the organization of the “International School on Magnetic Resonance and Brain Function - XII Workshop” in Erice, Italy.

Job-related skills

Good attitude in teaching:

- 1st Semester academic year 2007/2008. Collaborating in the teaching activity of Prof. Andrea Nigro, full professor at “La Sapienza” University of Rome, in the course “Systems and Signals Laboratory”;
- November 5th-7th 2015 – Teacher at Medical Physics School “Quality check in advanced MR procedures”, Fondazione Fatebenefratelli Roma.

Computer skills

- Programming:
 - Very good knowledge of scripting language Unix shell;
 - Very good experience in coding language Matlab;
 - Experience in coding language LabView, IDL, SciLab;
 - Experience in data analysis tools (neuroscience: AFNI, FSL, SPM, EEGLAB, astronomy: IRAF, SMART, ISAP);
 - Experience in data modeling (e.g. photoionization processes with code Cloudy08);
 - Experience in using languages HTML e CSS.
- Applications:
 - Very good knowledge and experience of Mac OS, Linux and Windows systems;
 - Very good experience in Microsoft Office Word, Excel, PowerPoint;
 - Very good experience of test writing applications LaTeX;
 - Knowledge of SQL (Access).

- Other skills
- Photography – 1st and 2nd level certificate at “Officine Fotografiche, Roma”;
 - Good attitude to assimilate and use IT tools.

Driving license B

ADDITIONAL INFORMATION

Honors and awards

- December 12th 2014 2-year fellowship (assegno di ricerca) awarded by “Enrico Fermi” Centre MARBILab
- July 31th 2013 1-year fellowship “Paola de Mansi” awarded by the Italian Ministry for Foreign Affairs and the Israeli Centers of Excellence.
- February 16th 2013 10-month fellowship awarded by Edmund & Lily Safra Center for Brain Science
- September 1st 2010 2-year fellowship awarded by Beverly Sackler school of Astronomy
- June 1st 2007 3-year fellowship (assegno di ricerca) awarded by Italian Space Agency (ASI) to work at the Institute of Physics of Interplanetary Space and cover the PhD studies
- Academic Year 2006-2007 Win the competition to obtain one position for the “Dottorato di Ricerca in Astrofisica XXII Ciclo” (starting the 3 years long PhD in Astrophysics) at “La Sapienza” University of Rome.

Selected Publications on Refereed Journals

- Tommasin, S.**; Gili, T.; Mascali, D.; Eid Assan I.; Moraschi M.; Fratini M.; Wise R.G.; Macaluso E.; Giove, F.; Spatiotemporal rearrangement of resting state networks under steady state stimulation. Under review
- Tommasin, S.**; Gili, T.; Mascali, D.; Eid Assan I.; Moraschi M.; Fratini M.; Wise R.G.; Macaluso E.; Giove, F.; Relation between spectral and spatiotemporal properties of low frequency BOLD fluctuations within the Default Mode Network. To be submitted
- Tommasin, S.**; Gili T.; Giove, F.; Wise R.G.; Neural correlate of Propofol—induced BOLD modulation. To be submitted
- Tommasin, S.**; Netzer, H.; Sternberg, A.; Nordon, R.; Lutz, D.; Bongiorno, A.; Berta, S.; Magnelli, B.; Le Floch, E.; Riguccini, L.; Pozzi, F.; Star formation in LINER host galaxies at $z \sim 0.3$. 2012, ApJ, 753, 155.
- Tommasin, S.**; Spinoglio, L.; Malkan, M. A.; Fazio, G.; Spitzer IRS High Resolution Spectroscopy of the 12 μ m Seyfert Galaxies. II. Results for the Complete Dataset. 2010, ApJ, 709, 1257.
- Tommasin, S.**; Spinoglio, L.; Malkan, M. A.; Smith, H.; González-Alfonso, E.; Charmandaris, V.; Spitzer IRS High Resolution Spectroscopy of the 12 μ m Seyfert Galaxies. I. First Results. 2008, ApJ, 676, 836.
- Wu, Y.; Charmandaris, V.; Huang, J.; Spinoglio, L.; **Tommasin, S.**; Spitzer/IRS 5-35 μ m Lowresolution Spectroscopy of the 12 μ m Seyfert Sample. 2009, ApJ, 701, 658.
- Seminars 2011 to present
Max Planck Institute for Extraterrestrial physics – Munich;
Technion – Haifa;
Hebrew University – Jerusalem;
Institut d’Astrophysique de Paris;
Laboratory of Galaxies Stars Physics and Instrumentation (G.E.P.I.) – Meudon;
Infrared Processing and Analysis Center, Caltech – Pasadena;
University of California Los Angeles;
The Carnegie Observatories – Pasadena.
ISMIRM 2016 - Classical poster presentation “Spatial and temporal modulation of brain dynamics in response to task execution”.

