



# UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4407

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at Dipartimento di Economia, Management e Metodi Quantitativi  
Scientist- in - charge: Prof.ssa Tommasi Chiara

[Alessandro and Lanteri]

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	LANTERI
Name	ALESSANDRO
Date of birth	[19/04/1987]

### PRESENT OCCUPATION

Appointment	Structure
ASSEGNISTA DI RICERCA	UNIVERSITA' DEGLI STUDI DI TORINO – ESOMAS DEPARTMENT

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	SCIENZE STATISTICHE E DECISIONALI	ROMA LA SAPIENZA	2012
PhD	STATISTICA METODOLOGICA	ROMA LA SAPIENZA	2016
Master (120 CFU)	MASTER 2 IN "Mathématiques de la modélisation et de la décision – mathématiques appliquées à la finalité Recherche"	PARIS-DAUPHINE	2012
Other	BACHELOR OF ARTS IN STATISTICS	UNIVERTSITA' DEGLI STUDI DI TORINO	2009

### FOREIGN LANGUAGES

Languages	level of knowledge
ITALIAN	Native Speaker
ENGLISH	Advanced
FRENCH	Waystage



## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2013	587€ from SMI, Scuola normale Superiore Cortona to attend a summer school
2011	PHD fellowship from University of Rome La Sapienza
2010	Erasmus Fellowship from University of Rome La Sapienza

## TRAINING OR RESEARCH ACTIVITY

- 07/2018-Present  
**Postdoctoral Fellow (assegnista di ricerca)**, University of Turin -ESOMAS department, Torino (TO) Italy. Supervisor: Raffaele Argiento. "Modelli di mistura non parametrici per dati funzionali e longitudinali". Developing Hierarchical Model for functional data with application to Sport Data "Distribuzioni a priori non parametriche per lo studio del microbioma". Developing Split-Merge algorithms and non-parametric Bayesian model for mixtures
- 06/2016-06/2018  
**Postdoctoral Fellow**, Johns Hopkins University - Department of Applied Mathematics and Statistics, Baltimore, (MD) USA. Supervisor: Mauro Maggioni. developing algorithms for single-index and multi-index models with theoretical guarantees for finite-sample convergence rates developing multiscale methods for manifold learning developing fast algorithms to solve over-determined linear systems
- 01/2016-06/2016  
**Visiting Assistant Professor**, Duke University - Department of Mathematics, Durham, (NC) USA. Supervisor: Mauro Maggioni. developing algorithms for Subspace Clustering with theoretical guarantees for finite-sample convergence rates
- 04/2015-12/2015  
**Visiting Scholar**, Duke University - Department of Mathematics, Durham (NC), USA. Supervisor: Mauro Maggioni. developing multiscale methods for Intrinsic dimension estimation

## DIDACTIC ACTIVITIES

- 2019/2020 Lecturer of "Bayesian Statistics" (Master degree Level, 20 hours, in English), Collegio Carlo Alberto, Turin, Italy.
- 2019/2020 Senior Teaching Assistant of "Statistics" (60 hours), ESOMAS department, University of Turin, Torino, Italy
- 2018/2019 Lecturer of "Bayesian Statistics" (Master degree Level, 18 hours, in English), Collegio Carlo Alberto, Turin, Italy.
- 2014/2015 Teaching Assistant of "Statistics" (1 module), Department of Statistics, Roma La Sapienza, Rome, Italy



## PROJECT ACTIVITY

Year	Project
2017	NSF Award 1737984 “ATD: Estimation and Anomaly Detection for highdimensional Data, Maps and Dynamic Processes”, Project Manager: Mauro Maggioni
2014	Roma La Sapienza, University Project “Bayesian bandits in clinical research”, Project manager: Pierpaolo Brutti
2014	Roma La Sapienza, University Project “Integro-differential operators, subordinators and slow diffusions with long-range dependence”, Project manager: Bruno Toaldo
2013	Roma La Sapienza, University Project “I disegni a due stadi nelle prove cliniche: nuove prospettive metodologiche”, Project manager: Stefania Gubbiotti

## RESEARCH GROUPS COLLABORATIONS

- “de Castro” Statistics Initiative, Torino, Italy
- Simula Research Laboratory, Oslo, Norway
- Johns Hopkins Mathematical Institute for Data Science, Baltimore (MD), USA
- ALTAMEDICA – Artemisia, Rome, Italy

## OTHER SCIENTIFIC ACTIVITIES

## ORGANIZATION OF SCIENTIFIC EVENTS

- 2016-2018 Data Seminar cycle at Johns Hopkins University, Math Department, Baltimore (MD) USA
- 2016-2018 PhD Programme assistant at Johns Hopkins University, Applied Math and Statistics Department, Baltimore (MD) USA
- 2014 Assistant for “Conference of European Statistics Stakeholder”, Rome, Italy
- 2013 Assistant for “Approximate Bayesian Computation”, Rome, Italy

## REVIEWING ACTIVITIES

- Journal of Statistical Planning and Inference
- Bayesian Analysis
- International Journal of Stochastic Analysis

## COMPUTER SKILLS

Programming: R, MATLAB, SAS, STATA, SPSS, C++

Writing: LATEX, LyX, OpenOffice, Microsoft Office



## RESEARCH INTERESTS

- Theoretical and computational aspects of Machine learning techniques
- Single-Index and Multi-Index models
- Subspace Clustering
- Manifold Learning and Intrinsic Dimension Estimation
- Parametric and Non Parametric Bayesian Statistics
- Functional Regression

My research interests revolve around the **Big Data** challenge. My goal is to develop theoretically rigorous methodologies competitive from a computational standpoint

## CONGRESSES AND SEMINARS

Date	Title	Place
2020	SIAM Conference on Uncertainty Quantification ( <b>Invited - to be held</b> )	Munich, Germany
2019	12th International Conference of the ERCIM WG on Computational and Methodological Statistics CMStatistics ( <b>Invited - to be held</b> )	London, UK
2019	BNP 12th International Conference on Bayesian Nonparametrics, ( <b>Contributed</b> )	Oxford, UK
2019	BISP Eleventh Workshop on Bayesian Inference in Stochastic Processes, ( <b>Contributed</b> )	Madrid, Spain
2017	SIS Scientific Meeting ( <b>Contributed</b> )	Florence, Italy
2014	The American University of Rome ( <b>Invited Seminar</b> )	Rome, Italy



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## PUBLICATIONS

ARTICLES PUBLISHED IN REVIEWED JOURNALS/BOOKS AND PHD THESIS
A. Lanteri, M. Maggioni, S. Vigogna (2019). <i>A biased Kaczmarz algorithm for clustered equations.</i> Published in New Statistical Developments in Data Science, 447-456, Springer International Publishing
A. Lanteri, Supervisor: P. Brutti (2016). <i>Novel Methods for Intrinsic Dimension Estimation and Manifold Learning.</i> PhD Thesis Università La Sapienza
A. Profico, A. Veneziano, A. Lanteri, P. Piras, G. Sansalone, G. Manzi (2016). <i>Tuning Geometric Morphometrics: an R tool to reduce information loss caused by surface smoothing.</i> Published in Methods in Ecology and Evolution
F. Padula, M. Giorlandino, S. Capriglione, M.C. Teodoro, A. Lippa, S.E. Minutolo, A. Lena, A. Lanteri, P. Brutti, L. D'Emidio, L. Mangiafico, P. Cignini, C. Giorlandino (2016). <i>Does the ESHRE/ESGE Classification of Mullerian Anomalies Correlate with the Occurrence Of Pregnancy? A Comparison between Two Definitions of Myometrial Thickness.</i> Published in Acta Medica International

PUBLICATIONS IN CONFERENCE PROCEEDINGS
A. Lanteri, M. Maggioni (2017). <i>A Multiscale Approach to Manifold Estimation.</i> Published in SIS 2017. Statistics and Data Science: new challenges, new generations
A. Profico, A. Veneziano, A. Lanteri, G. Manzi (2014). <i>Smoothing procedures in Geometric Morphometrics: a critical assessment.</i> Proceedings in European Society for the study of Human Evolution
P. Brutti, A. Lanteri, C. Ricciuti (2014). <i>Bayesian Inference for the Intrinsic Dimension.</i> Proceedings in 47th SIS Scientific Meeting of the Italian Statistica Society

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: \_\_\_\_\_TORINO, 12/11/2019\_\_\_\_\_

SIGNATURE