A. De Masi – Short Curriculum

<u>Current position</u>: Professor in Probability and Statistics Mathematics at the University of L'Aquila.

<u>Previous positions</u>: (all at the University of L'Aquila): researcher in Mathematical Physics 1981-1987, Associate Professor in Mathematical Physics: 1987-2000. Full Professor since 2000.

Academic services at the University of L'Aquila

Member (June 2018--present) of the Commissione Programmazione Risorse of the Department DISIM (Ingegneria e Scienze dell'Informazione e Matematica)

Member of the Commissione Ricerca of the of the Department DISIM (From 2012 till June 2018) Member of the Collegio di Disciplina dell'Ateneo (2012-2015)

President (elected) of the Corso di Laurea in Matematica: 2001 – 2003

Vice-President of the Corso di Laurea in Matematica: Maggio 2000 -Ottobre 2001.

Activities as coordinator of research:

- Coordinator at University of L'Aquila (department DISIM) of the phd programs:

"Mathematics and Models" (2013-2019) and "Mathematics" (2003-2012).

- Responsible of the post- doc position for the research project *Stochastic Processes, Statistical Mechanics and Applications* (2019)

- Responsible of the post- doc position for the research project: *Collective phenomena and complex systems*.

Research track -record:

- I am author and coauthor of 75 peer-reviewed articles in major international journals (a list can be found in http://people.disim.univaq.it/~demasi/)

- In addition, I have published:

2 contributions in books: "Spin systems with long range interactions" and "A survey of the hydrodynamical behavior of many particle systems" (in collaboration with N. Ianiro, A. Pellegrinotti, E. Presutti)

1 monograph in Lecture Notes in Mathematics: "*Mathematical methods for hydrodynamical limits*" (in collaboration with E. Presutti)

1 monograph in Springer Briefs in Mathematical Physics: "Free boundary problems in PDEs and particle systems" (in collaboration with G. Carinci, C. Giardinà, E. Presutti),

<u>Awards</u>:

- 2018 IMS (Institute of Mathematics Statistics) Medallion Lecture

- Prize 1996 from Institut Henri Poincaré to the paper "Brownian fluctuations of the interface in the \$d=1\$ Ginzburg-Landau equation with noise", in collaboration with S. Brassesco and E. Presutti, published in Annales de l'Institut Henri Poincaré, Section"Probabilites et Statistiques".

Grants:

Associate investigator of research unit at University of L'Aquila of the researches projects: "Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale" PRIN 1994, PRIN 1998, PRIN 2000, PRIN 2002, PRIN 2004, PRIN 2007 and PRIN 2009. Editorial activities and professional counseling:

- I am in the scientific advisory board of the journal "Mathematics and Mechanics of Complex Systems"

- I have been in the editorial board of Journal Statistical Physics 1991-1993.

- Referee activity for several international journals.

- Referee of some NSF projects.

- I have been in the scientific committee of the project France-Italy, GREFI MEFI financed by CNRS, INdAM and embassy of France.

- I served panels of the Deutsche Forschungsgemeinschaft (DFG) German Research Foundation.

Organization of conferences:

I have organized and co-organized several workshops and international conferences in different places. Same of the most recent are:

- 2009: member of the scientific committee of 33rd Conference on Stochastic Processes and their Applications, Berlin July 2009

- 2013: in the scientific committee of the XVII-th Brazilian school of Probability

- 2014: session organizer of the 37th Conference on Stochastic Processes and their Applications, Buenos Aires, 2014

- 2014: in the organizing scientific committee of "Blow-up solutions of the Navier-Stokes equation and the Renormalization Group", GSSI-L'Aquila. This conference has been organized following Abel prize 2014 of Prof. Y. Sinai who besides participating to the meeting has been the principal organizer of the conference.

- 2016: in the organizing scientific committee of the session "Probability and Statistical Mechanics" in the first Joint Meeting Brazil - Italy in Mathematics IMPA, Rio de Janeiro 2016
- 2018 I have organized the session on `` Diffusion in simple and multi-component fluilds" in the conference ``Inhomogeneous Random Systems" Institut Henri Poincaré –Paris, January, -2019: in the organizing scientific committee of the XXIII-th Brasilian school of probability, São Carlos (Brasil) July 22 - 26,

-2019: organizing together with F.Flandoli of the session ``Calcolo delle probabilità e statistica matematica" of the XXI conference UMI (Unione Matematica Italiana), Sept. 2-7, --2019: in the organizing scientific committee of the 2019 Rouen Probability Meeting, Sept. 23-27

Visiting professor: (2012-2019):

- Center for Interdisciplinary Research, ZIF, Bielefeld (Germany), July 2012

- Departamento de Matemática, Universidad de Buenos Aires, August 2012

- University Paris Descartes (Paris), September 2013.

- Technion – Israel Institute of Technology, Haifa (Israel), December 2013.

- Département de Mathématiques, Faculté des Sciences et Techniques, Université de Cergy-Pontoise (France), November 2014.

- Institute Henri Poincaré (Paris) February-March 2015 (in occasion of the trimester on "Disordered systems, random spatial processes and some applications").

- Institute Henri Poincaré (Paris), June 2017 (in occasion of the trimester on ``Stochastic dynamics out of equilibrium").

- Université Paris-Dauphine, Ceremade (Paris) January 16 – February 16, 2019

Invited courses and summer schools:

I have given courses in several institutions as:

- course at the conference: Particle Systems and PDE's VII, Palermo, November 2018

- course for PhD students at Gran Sasso Science Institute January 2016
- course at the Institute H. Poincaré (Paris) March 2015
- course at the "Rencontres de Probabilites a Rouen", September 2013
- course at the CIMPA summer school "From Classical to Modern Probability", (the lecture notes of the course have been published in the 2003 volume of the series "Progress in Probability" Birkhauser)
- course for PhD at IMPA (Rio de Janeiro) 2001.

Invited speaker:

I have been invited speaker at many conferences, some of them are:

- main speaker at the 2019 Mark Kac seminar Utrech, Olanda,

- plenary speaker at the 40th conference on Stochastic Processes and their Applications, Gotenborg, June 2018,

- speaker at the conference "Stochastic dynamics out of equilibrium", 'Institute Henry Poincare', Paris, June 2017,

- speaker at the conference "Non-equilibrium: Physics, Stochastic and Dynamical Systems", at CIRM, Marseille, January 2016,

- speaker at the X International Conference "Stochastic and Analytic Methods in Mathematical Physics", Yerevan, September 2016

- speaker at the conference "Interplay of Analysis and Probability in Applied Mathematics" Oberwolfach, July-August 2015

- speaker at the conference "Processes with variable memories in probability and statistical mechanics", Universitè de Créteil, Paris, 2014

speaker at the 111-th Statistical Mechanics Conference, Rutgers University (Usa) May 2014
 speaker at the conference "Dynamical and disordered systems" at CIRM, Marseille, February 2013

- speaker at the conference "Kinetic description of multi-scale phenomena", Heraklion (Grece), June 2013

- speaker at the conference "Discrete Random Structures, Representation Theory and Interacting Particle Systems", Bielefeld University (Germany) July 2012.

- Plenary speaker at the XVI-th Brazilian school of Probability, Recife (Brasil) August 2012.