

# Prof. Giuseppe Mulone

## General Info

- Name: **Giuseppe Mulone**
- Home Page: <http://www.dmi.unict.it/mulone/>
- Nationality: Italian

## Education

- Master (Degree) *in Mathematics, summa cum laude*, University of Catania, July 11<sup>th</sup>, 1973.

## Distinctions, Awards:

From 2008: Member of the Accademia Zelantea di Acireale

From 2015: Member of the Accademia Peloritana dei Pericolanti di Messina

From 2014: Member of the Accademia Gioienia di Catania

## Google Scholar Citations

<https://scholar.google.it/citations?user=i85f6agAAAAJ>

## Positions

- **C.N.R. Grant in Mathematical Physics** at Seminario Matematico of Catania University, October 1<sup>st</sup>, 1973 – October 31<sup>st</sup>, 1974

- Winner of a competition for a “**Contratto quadriennale di Ricerca**” of Mathematics, University of Catania, December 21<sup>st</sup>, 1978 – December 18<sup>th</sup>, 1981 at *Cattedra di Meccanica Razionale della Facoltà di Scienze Matematiche Fisiche e Naturali*.
- “**Professore Incaricato**” of Calculus II, at Engineering Faculty of University of Catania, December 21<sup>st</sup>, 1978 – December 18<sup>th</sup>, 1981.
- “**Professore Incaricato**” of Mathematics, at Natural Science Faculty of University of Catania, December 21<sup>st</sup>, 1978 – December 18<sup>th</sup>, 1986.
- **Researcher** MAT/07 (Mathematical Physics), University of Catania, December 19<sup>th</sup>, 1981 – January 28<sup>th</sup>, 1986.
- **Associate Professor** MAT/07 (Mathematical Physics), University of Catania, January 29<sup>th</sup>, 1986 – October 31<sup>st</sup>, 1994.
- **Professor** MAT/07 (Mathematical Physics), University Federico II, Naples, November 1<sup>st</sup>, 1994. – October 31<sup>st</sup>, 1996.
- **Professor** MAT/07 (Mathematical Physics), University of Catania, from November 1<sup>st</sup>, 1996.
- **Chair of Department of Mathematics and Computer Sciences**, University of Catania, since November 1<sup>st</sup>, 2008 to 31 October 2015
- **Elected member of *Senato Accademico* of University of Catania**, since June 2012 to 31 October 2015
- **Member of the Management Board of the University of Catania**, since March 2017.
- **Member of the Editorial board of *Ricerche di Matematica* (Springer)** since 2016.

## Society

I.S.I.M.M. (International Society for the Interaction of Mechanics and Mathematics)

G.N.F.M. (Gruppo Nazionale Fisica Matematica)  
U.M.I.(Unione Matematica Italiana)

## (Some) Organizing Activity

- Chair of the Organizing Committee and Member the Scientific Committee of the International Workshop *Waves and Stability in Continuous Media (WASCOM)*, Acireale - Catania, September 1995.
- Chair of the Organizing Committee and Co-Chair of the Scientific Committee of the International Workshop *Waves and Stability in Continuous Media (WASCOM)*, Acireale - Catania, September 2005.
- Chair of the Organizing Committee and Co-Chair of the Scientific Committee of the International Workshop *Fifth China-Italy Colloquium on Applied Mathematics*, Acireale, September 27–30, 2010.
- Chair of the Organizing Committee and Co-Chair of the Scientific Committee of the International Workshop *Waves and Stability in Continuous Media (WASCOM)*, Catania, June 2021.

## Other Scientific Activities

- He has participated in *more than 70* International and National Meetings and Workshops. In many of them he has been Invited Speaker.
- Professor of the course on *Qualitative analysis in fluid dynamics* at the XXIII Summer School of Mathematical Physics in Ravello, Italy (September 1998).
- *Visiting Professor* at Southwest Normal University Chongqing (October, 2002, October, 2004, September 2006, October 2008)
- *Seminars and scientific research* at Durham University, UK (September, 2001, October, 2006)
- He has been Member of the Editorial Board of *Ricerche di Matematica* and *Le Matematiche*

- *Referee* for many journals (among the others: Proc. Roy Soc London A, J. Math. Anal. Appl., Nonlinear Analysis, Int. J. Eng. Science, Math. Meth. Appl. Sci., Appl. Anal., Continuum Mech. and Thermodyn., Acta Mechanica, Mechanics Research Communications, etc.)
- He has attended to many selection boards for “Full Professor, Associate Professor and Researcher” Positions in Italy in the Scientific Group of Mathematical Physics.

## Research Projects

- Coordinator of Local research Project (PRA) on “Qualitative analysis and stability in Fluid dynamics”, “Qualitative analysis and stability in Fluid dynamics, Thermodynamics and Biomathematics” (1994, 1996, 1998, 2000, 2002, 2004, 2006, 2008).
- Local Coordinator of a PRIN Project 2000 Coordinator Prof. Ruggeri (Non Linear Mathematical Problems of Wave Propagation and Stability in Models of Continuous Media)
- Local Coordinator of a PRIN Project 2003 Coordinator Prof. Ruggeri (Nonlinear Mathematical Problems of Wave Propagation and Stability in Models of Continuous Media)
- Local Coordinator of a PRIN Project 2005 Coordinator Prof. Ruggeri (Nonlinear Propagation and Stability in Thermodynamical Processes of Continuous Media)
- Local Coordinator of a PRIN Project 2017 Principal Investigator Prof. Marco Sammartino (Multiscale phenomena in Continuum Mechanics: singular limits, off-equilibrium and transitions)

## Research Activity

- Continuum mechanics: fluid dynamics and magnetofluid dynamics
- Bénard problems, convective instability

- Qualitative analysis and stability, optimal Lyapunov functions
- Flows in porous media
- Dynamical systems: autonomous and non-autonomous systems
- Wave propagation
- Mathematical models for biology, epidemic models
- Partial Differential Equations of parabolic type (reaction-diffusion equations), parabolic-hyperbolic equations
- Navier-Stokes systems

Prof. Mulone is the author of more than 100 publications on international and national journals and on conference proceedings.