Fabio Gastaldi

Personal Data

Born on January 1st, 1951

Bio and education

High school diploma released by Liceo Ginnasio “Ugo Foscolo” (Pavia, Italy) on 1969.

Degree in Physics on 1973, released by Università di Pavia.

University career

1998-	Full Professor, Università del Piemonte Orientale
1995-1998	Full Professor, Università di Torino
1991-1995	Full Professor, Università di Brescia
1990-1991	Full Professor, Università di Trieste
1988-1990	Adjunct Professor, Università di Pavia
1977-1988	Researcher, Consiglio Nazionale delle Ricerche

University positions

2013-	President, Presidio di Qualità, Università del Piemonte Orientale
2012-	Vice-Rector, Università del Piemonte Orientale
2009-2012	President, Nucleo di Valutazione, Università del Piemonte Orientale
2004-2008	Appointed by the Rector to the Scientific Research, Università del Piemonte Orientale
2001-2004	Dean, Facoltà di Scienze Matematiche, Fisiche e Naturali, Università del Piemonte Orientale

Main fields of interest

1. Contact problems in elasticity
2. Abstract variational problems and applications
3. Singular perturbation problems for elliptic and parabolic equations
4. Domani decomposition methods
5. Quasistatici models for frictional contact problems
6. Non-coercive optimization problems in convex analysis
7. Integer solutions to bankruptcy problems
8. Study of electoral systems

CURRENT ISSUES OF RESEARCH

1. **Integer solutions to bankruptcy problems**

The problem of allocating an estate available in integer unities among several agents that claim a part of it is considered, when the estate is not enough to satisfy all requests. With respect to the existing literature, the constraint on the integer character of the estate poses new questions on existence and uniqueness of the solutions, which can be described in terms of the classical families of solutions to bankruptcy problems, suitably adapted to the integer case and obtained by means of constructive algorithms.

2. **Problems of allocating an estate available in integer unities**

Let us suppose that an estate made by indivisible unities has to be distributed among a number of agents that claim some right on it. Unlike in the bankruptcy case, here we suppose that the agents may possibly join in order to exploit their share in a better way. The problem can be modeled suitably in the framework of the cooperative game theory.

TOP FIVE PAPERS

1. 1986. Some existence results on non-coercive variational inequalities. pp.617-659. In ANNALI DELLA SCUOLA NORMALE SUPERIORE DI PISA. CLASSE DI SCIENZE - ISSN:0391-173X vol. 13
   (in collaborazione con Baiocchi C; Tomarelli F)
2. 1989. A class of noncoercive variational inequalities. pp.1471-1507. In COMMUNICATIONS IN PARTIAL DIFFERENTIAL EQUATIONS - ISSN:0360-5302 vol. 14
   (in collaborazione con Gilardi G)
3. 1990. Coupling of two-dimensional hyperbolic and elliptic equations. pp.347-354. In COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING - ISSN:0045-7825 vol. 80
   (in collaborazione con Quarteroni A; Sacchi Landriani G)
4. 1993. On a domain decomposition for the transport equation: theory and finite element approximation. pp.111-135. In IMA JOURNAL OF NUMERICAL ANALYSIS - ISSN:0272-4979 vol. 14
   (in collaborazione con Gastaldi L)
5. 2014. Integer solutions to bankruptcy problems with non-integer claims. DOI:10.1007/s11750-013-0304-x. pp.892-933. In TOP - ISSN:1134-5764 vol. 22 (3)
   (in collaborazione con Fragnelli V; Gagliardo S)