

Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)

Françoise Demengel

Address(es)

Telephone(s)

Fax(es)

E-mail

francoise.demengel@cyu.fr

Nationality

Date of birth

Gender

Work experience

Mathematics, research, and teaching

Dates

Add separate entries for each relevant post occupied, starting from the most recent. (remove if not relevant, see instructions)

Occupation or position held

Professor tenured position) at Cergy Pontoise university, France

From 1991 until now.

Researcher at Center national of scientific research (CNRS), from 1982 until 1990.

Student at the école Normale supérieure of Paris from 1977 until 1981.

Name and address of employer

University of Clergy Pontoise, 2 avenue Adolphe Chauvin, 95302, Cergy Pontoise, France ,

Type of business or sector

Teaching.

Education and training

Mathematics and research at the university and at the ecole Normale Suoerieure

Dates	Phd Thesis (Habilitation à diriger des recherches) 1987 University of Orsay Paris 11, France Thesis of University, University of Orsay 1981 Agrégation of Mathematics, 1980 Entry at the Ecole Normale Supérieure, 1977 Baccalauréat, 1974
Title of qualification awarded	Phd, Professor.
Principal subjects/occupational skills covered	Analysis of Pde, (research) Teaching in Master 1 and 2 at the university Direction of Thesis
Name and type of organisation providing education and training	University, Ecole Normale Supérieure
Level in national or international classification	
Personal skills and competences	
Mother tongue(s)	French
Other language(s)	English, Italian
Self-assessment	
European level (*)	
Language	
Language	
Technical skills and competences	Teaching and research in Analysis of pde
Artistic skills and competences	Piano

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
English	C1	B2	B2	C1
Italian	B2	B2	B1	A1

(*) [Common European Framework of Reference for Languages](http://europa.eu/rapid/press-release-IP-08-1200_en.htm)

Annexes

Publications of the last ten years

F. Demengel, O. Goubet, { *Existence of boundary blow up solutions for singular or degenerate fully nonlinear equations* }

Communications on pure and applied analysis, Pages: 621 - 645, Volume 12, Issue 2, March 2013. <https://hal.archives-ouvertes.fr/hal.00842108>

I. Birindelli, F. Demengel, { *Regularity for radial solutions of degenerate fully nonlinear equations.* } Non linear analysis, TMA, Vol 75, Issue 17, Nov 2012, p. 6237-6249

<https://hal.archives-ouvertes.fr/hal.00842111>

I. Birindelli, F. Demengel,

{ *Overdetermined problems for fully non linear operators.* } Comm. Partial Differential Equations 38 (2013), no. 4, 608 - 628.

<http://dx.doi.org/10.1080/03605302.2012.756521>

I. Birindelli, F. Demengel,

{ $C^{1,\beta}$ regularity for Dirichlet problems associated to fully nonlinear degenerate elliptic

equations}, ESAIM COCV, /volume 20, Issue 40, 2014, pp. 119-1024. et <https://hal.archives-ouvertes.fr/hal-01076713>.

F. Demengel

{ *Qualitative properties of a nonlinear system involving the p -Laplacian operator and a DeGiorgi type result* }, Applicable Analysis, 94, (2015), n° 4, pp 725-746. et

<https://hal.archives-ouvertes.fr/hal.01076363>.

I. Birindelli, F. demengel { *Hölder regularity of the gradient for solutions of fully nonlinear equations with sublinear first order terms* }

Geometric Methods in PDEs

Series: Springer INdAM Series, Vol. 11

Citti, G., Manfredini, M., Morbidelli, D., Polidoro, S., Uguzzoni, F. (Eds.) 2014.

F. Demengel

{ *Qualitative properties of a nonlinear system involving the p -Laplacian operator and a DeGiorgi type result* }, Appl. Anal. 94 (2015), no. 4, 725-746.

<https://hal.archives-ouvertes.fr/hal.01076363>.

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Citti, G., Manfredini, M., Morbidelli, D., Polidoro, S., Uguzzoni, F. (Eds.) 2014.

{\lem Lipschitz interior regularity for the viscosity and weak solutions of the Pseudo p -Laplacian Equation.}

Advances in Differential equations, Vol. 21, Numbers 3-4, March April 2016

I. Birindelli , F. Demengel

{\lem {Fully nonlinear operators with \ Hamiltonian:

H}older regularity of the gradient.}} Nonlinear Differ. Equ. Appl. (2016) 23: 41.

doi:10.1007/s00030-016-0392-z

Demengel Fran\c coise : {\lem Regularity properties of Viscosity Solutions for Fully Non linear Equations on the model of the anisotropic $\vec p$ -Laplacian}.

Asymptotic Analysis, vol. 105, no. 1-2, pp. 27-43, 2017

Demengel, Fran\c coise with Isabeau Birindelli : {\lem Existence and regularity results for fully nonlinear operators on the model of the pseudo Pucci's operators} . J. Elliptic Parabol. Equ. 2 (2016), no. 1-2, 171-187.

Demengel, Fran\c coise; Dumas, Thomas {\lem Extremal functions for an embedding from some anisotropic space, involving the "one Laplacian"}. Discrete Contin. Dyn. Syst. 39 (2019), no. 2, 1135–1155. 35J62 (35B40)

-Birindelli, Isabeau; Demengel, Fran\c coise; Leoni, Fabiana {\lem Dirichlet problems for fully nonlinear equations with \ "subquadratic" Hamiltonians}. Contemporary research in elliptic PDEs and related topics, 107–127, Springer INdAM Ser., 33, Springer, Cham,

Birindelli, Isabeau; Demengel, Fran\c coise; Leoni, Fabiana {\lem $C^{1,\gamma}$ regularity for singular or degenerate fully nonlinear equations and applications}. NoDEA Nonlinear Differential Equations

Appl. 26 (2019), no. 5, Paper No. 40,

Birindelli, Isabeau; Demengel, Fran\c coise; Leoni, Fabiana {\lem Ergodic pairs for singular or degenerate fully nonlinear operators}. ESAIM Control Optim. Calc. Var. 25 (2019), Paper No. 75, 28 pp

Birindelli, Isabeau; Demengel, Fran\c coise; Leoni, Fabiana {\lem Boundary asymptotics of the ergodic functions associated with \ fully nonlinear operators through a Liouville type theorem}. Discrete Contin. Dyn. Syst. 41 (2021), no. 7, 3021–3029.

Demengel, Fran\c coise {\lem Ergodic pairs for degenerate pseudo Pucci's fully nonlinear operators}. Discrete Contin. Dyn. Syst. 41 (2021), no. 7, 3465–3488.

Birindelli, Isabeau; Demengel, Fran\c coise; Leoni, Fabiana {\lem Mixed boundary value problems for fully nonlinear degenerate or singular equations.} Nonlinear Anal. 223 (2022), Paper No. 113006, 22 pp.

\subsection{Books }

-Th\'eorie des mesures et distributions, with. Gilbert Demengel,
, Collection Universit\'es, editions Ellipses, 2000.

-Convexit  dans les espaces fonctionnels, with. Gilbert Demengel,
, Collection Universit es, Editions Ellipses, 2004.

-Espaces fonctionnels, utilisation dans la r solution des  quations aux d riv es partielles,
with Gilbert Demengel,
Collections Savoirs actuels, EDP sciences,  ditions du CNRS.

-Functional spaces for the theory of Elliptic partial Differential Equations
F. Demengel, G. Demengel, Springer 2012
ISBN 978-1-4471-2806-9

ISBN 978-2)7598-0698

F. Demengel
{ Lipschitz interior regularity for the viscosity and weak solutions of the Pseudo p -Laplacian Equation.}
 Advances in Differential equations, Vol. 21, Numbers 3-4, March April 2016

I. Birindelli , F. Demengel

*{ Fully nonlinear operators with λ Hamiltonian:
 $H(\cdot)$ older regularity of the gradient.}* Nonlinear Differ. Equ. Appl. (2016) 23: 41. doi:10.1007/s00030-016-0392-z

Demengel Françoise : *{ Regularity properties of Viscosity Solutions for Fully Non linear Equations on the model of the anisotropic $\vec{p}$ -Laplacian.}*
 Asymptotic Analysis, vol. 105, no. 1-2, pp. 27-43, 2017

Demengel, Françoise with Isabeau Birindelli : *{ Existence and regularity results for fully nonlinear operators on the model of the pseudo Pucci's operators}* . J. Elliptic Parabol. Equ. 2 (2016), no. 1-2, 171-187.

Demengel, Françoise; Dumas, Thomas *{ Extremal functions for an embedding from some anisotropic space, involving the "one Laplacian"}*. Discrete Contin. Dyn. Syst. 39 (2019), no. 2, 1135–1155. 35J62 (35B40)

-Birindelli, Isabeau; Demengel, Françoise; Leoni, Fabiana *{ Dirichlet problems for fully nonlinear equations with λ "subquadratic" Hamiltonians}*. Contemporary research in elliptic PDEs and related topics, 107–127, Springer INdAM Ser., 33, Springer, Cham,

Birindelli, Isabeau; Demengel, Françoise; Leoni, Fabiana *{ $C^{1,\gamma}$ regularity for singular or degenerate fully nonlinear equations and applications}*. NoDEA Nonlinear Differential Equations Appl. 26 (2019), no. 5, Paper No. 40,

Birindelli, Isabeau; Demengel, Françoise; Leoni, Fabiana *{ Ergodic pairs for singular or degenerate fully nonlinear operators}*. ESAIM Control Optim. Calc. Var. 25 (2019), Paper No. 75, 28 pp

Birindelli, Isabeau; Demengel, Françoise; Leoni, Fabiana *{ Boundary asymptotics of the ergodic functions associated with λ fully nonlinear operators through a Liouville type theorem}*. Discrete Contin. Dyn. Syst. 41 (2021), no. 7, 3021–3029.

Demengel, Françoise *{ Ergodic pairs for degenerate pseudo Pucci's fully nonlinear operators}*. Discrete Contin. Dyn. Syst. 41 (2021), no. 7, 3465–3488.

Birindelli, Isabeau; Demengel, Françoise; Leoni, Fabiana *{ Mixed boundary value problems for fully nonlinear degenerate or singular equations.}* Nonlinear Anal. 223 (2022), Paper No. 113006, 22 pp.

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-Théorie des mesures et distributions, with. Gilbert Demengel,
, Collection Universités, éditions Ellipses, 2000.

-Convexité dans les espaces fonctionnels, with. Gilbert Demengel,
, Collection Universités, Editions Ellipses, 2004.

-Espaces fonctionnels, utilisation dans la résolution des équations aux dérivées partielles, with Gilbert Demengel,
Collections Savoirs actuels, EDP sciences, l'éditions du CNRS.

-Functional spaces for the theory of Elliptic partial Differential Equations
F. Demengel, G. Demengel, Springer 2012
ISBN 978-1-4471-2806-9

ISBN 978-2)7598-0698

{Students}

I had about fifteen students which prepared and obtained a phd Thesis under my direction. Most of them have a good position in university or high schools when they have the famous "agregation of Mathematics", a french speciality .

Let us cite :

Thierry Astruc, ancient student of the Ecole Normale Supérieure of Cachan, now Maître de conférence à l'université du var.

Patrick Courilleau, ancient student of the Ecole Normale Supérieure of Cachan, then Maître de conférence à l'université de Cergy Pontoise, and now attached to the ministère of national education.

Melissa Motron now Professeur de Lycée in "classes Préparatoires aux Grandes écoles

Jerome Wigniolle now Professeur de Lycée in "classes Préparatoires aux Grandes écoles

Bruno Nazaret, student of l'ENS cachan,
next maître de conférence à Paris Dauphine, now Professor at Paris V Sorbonne

Mouna Kraiem, now "cadre " in the industry

Ferid Beldi now maître de Conférence at the university of Tunis

Neji Ali now professor in high school .

Thomas Dumas now professor in "classes Préparatoires aux Grandes écoles