

Ugo Pietro Gianazza

# Curriculum and List of Publications

Pavia, Italy  
June 2024



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## Personal Data of Ugo Pietro Gianazza



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Place of birth: Milan, Italy

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Languages known Italian mother tongue  
English very good knowledge, both spoken and written  
German good knowledge, both spoken and written

## Curriculum Vitae et Studiorum, October 2011–June 2024

### Vita

- **Present Position:** Full Professor of Mathematical Analysis at the Department of Mathematics of the University of Pavia since November 1<sup>st</sup> 2001.
- **Past Positions:**
  - Associate Professor of Mathematical Analysis at the School of Engineering of the University of Pavia, 1998–2001.
  - Assistant Professor of Mathematical Analysis at the Faculty of Science of the University of Pavia, 1992–98.
  - Lecturer in Mathematical Analysis at the School of Engineering of the University of Pavia, 1995–98.
  - Lecturer in Mathematical Analysis at the School of Engineering of the Politecnico of Milan, 1988–92.
- **Studies:** MSc in Nuclear Engineering at the Politecnico of Milan, 1982–88; thesis work: “Study of the helicoidal equilibrium of a plasma as extremum of a variational functional”, advisors Marco Biroli and Ettore Minardi.

### Teaching Activity at Undergraduate Level

If not otherwise stated, all the courses were taught at the University of Pavia.

- AY 2011–2012
  - Course “Mathematical Methods” (First Level Degree in Mechatronics Engineering) at the Mantova Campus of the School of Engineering.
  - Course “Complements of Mathematical Analysis” (Second Level Degree in Civil Engineering) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Building Engineering and Architecture) at the School of Engineering.

- I advised one First Level Degree thesis in Mechanical Engineering.
- AY 2012–2013
  - Course “Complements of Mathematical Analysis” (Second Level Degree in Civil Engineering) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Building Engineering and Architecture) at the School of Engineering.
- AY 2013–2014
  - Course “Complements of Mathematical Analysis” (Second Level Degree in Civil Engineering) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Building Engineering and Architecture) at the School of Engineering.
  - Course “Functional Analysis and Differential Equations” (Second Level Degree in Mathematics).
- AY 2014–2015
  - Course “Advanced Mathematical Methods for Engineers” (Second Level Degree in Electronic Engineering) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Building Engineering and Architecture) at the School of Engineering.
- AY 2015–2016
  - Course “Advanced Mathematical Methods for Engineers” (Second Level Degree in Electronic Engineering) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Building Engineering and Architecture) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Civil Engineering) at the School of Engineering.
- AY 2016–2017
  - Course “Mathematical Analysis II” (Degree in Bioengineering, Electronic and Information Engineering) at the School of Engineering.
  - Course “Mathematical Analysis I” (Degree in Civil Engineering) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Civil Engineering) at the School of Engineering.
- AY 2017–2018
  - Course “Mathematical Analysis I” (Degree in Bioengineering, Electronic and Information Engineering, Industrial Engineering) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Bioengineering, Electronic and Information Engineering) at the School of Engineering; I taught approximately a third of this course.
  - Course “Complements of Mathematical Analysis and Statistics” (Degree in Industrial Engineering) at the School of Engineering.
  - Course “Mathematical Analysis II” (Degree in Civil Engineering) at the School of Engineering.
- AY 2018–2019



- Course “Mathematical Analysis I” (Degree in Industrial Engineering) at the School of Engineering.
- Course “Mathematical Methods” (Degree in Electronic and Information Engineering, Industrial Engineering) at the School of Engineering.
- Course “Complements of Mathematical Analysis” (Second Level Degree in Civil Engineering) at the School of Engineering.
- I advised one Second Level Degree thesis in Mathematics (Title: *Cloaking by change of variables in Impedance Imaging*) and a First Level Degree thesis in Mathematics.
- AY 2019–2020
  - Sabbatical Leave
- AY 2020–2021
  - Course “Mathematical Analysis I” (Degree in Industrial Engineering) at the School of Engineering.
  - Course “Mathematical Methods” (Degree in Electronic and Information Engineering, Industrial Engineering) at the School of Engineering.
  - Course “Complements of Mathematical Analysis” (Second Level Degree in Civil Engineering) at the School of Engineering.
  - I advised one First Level Degree thesis in Mathematics and three First Level Degree thesis in Engineering.
- AY 2021–2022
  - Course “Mathematical Analysis I” (Degree in Industrial Engineering) at the School of Engineering.
  - Course “Mathematical Methods” (Degree in Electronic and Information Engineering) at the School of Engineering.
  - I advised one First Level Degree thesis in Mathematics and one First Level Degree thesis in Engineering.
- AY 2022–2023
  - Course “Mathematical Analysis I” (Degree in Industrial Engineering) at the School of Engineering.
  - Course “Mathematical Methods” (Degree in Electronic and Information Engineering) at the School of Engineering.
  - Course “Mathematics for Construction and Territory” (Degree in Digital Technology for Construction, Environment and Territory) at the School of Engineering.
- AY 2023–2024
  - Course “Mathematical Analysis I” (Degree in Industrial Engineering) at the School of Engineering.
  - Course “Mathematical Methods” (Degrees in BioEngineering and in Electronic and Information Engineering) at the School of Engineering.
  - Course “Mathematics for Construction and Territory” (Degree in Digital Technology for Construction, Environment and Territory) at the School of Engineering.

## Teaching Activity at Graduate Level

- August 2012: In the framework of the *22<sup>nd</sup> Summer School* in Jyväskylä, Finland, a ten-hour-course on “Regularity for Singular Porous Medium Equations.”
- March 2015: In the framework of the School/Workshop *Phase Transition Problems and Nonlinear PDEs* (Bologna, Italy, March 9-11, 2015) a three-hour-course on “Boundary regularity for degenerate and singular parabolic equations.”
- August 2016: In the framework of the *Scuola Matematica Interuniversitaria* (Perugia, Italy, August 1-September 2, 2016) I taught a course on “Introduction to Partial Differential Equations.” It consisted in 10 hours of lectures, and 6 hours of problem-solving.
- January-February 2020: I taught a 10-hour course on “The Harnack Inequality for Degenerate and Singular Parabolic Equations of  $p$ -parabolic type” at the Center for Applicable Mathematics of TIFR, Bangalore, India.
- March-May 2023: I taught a 24-hour course on “Mathematical Topics in Fluid Mechanics and Applications” at Collegio Volta, Pavia, Italy.

## Public Engagement Activity

- March 14<sup>th</sup> 2019: I gave a 1-hour talk to a group of 40 third-and-fourth-year high school students about Mathematics and its applications. Title of the talk: “Oranges, honeycombs and error correction in codes.”
- January 17<sup>th</sup> 2020: I gave a 1-hour talk to a group of 15 fifth-year high school students about Mathematics and its applications. Title of the talk: “Hele-Shaw Cells, and ... Blobs, Bubbles and Fingers.”
- June 13<sup>th</sup> 2023: I gave a 1-hour talk to a group of 60 third-and-fourth-year high school students about Mathematics and its applications. Title of the talk: “Queen Dido and one of the oldest problems in Mathematics.”
- November 13<sup>th</sup> 2023–December 21<sup>st</sup> 2023: together with Paola Pietra (IMATI-CNR, Pavia) I organized the exhibition “The Legacy of Enrico Magenes” at the Biomedical University Residence in Pavia.

## Ph.D. Students

- Maria Sosio: Ph.D. in Mathematics and Statistics, University of Pavia. Title of the dissertation: *Regularity for Transport and Nonlinear Diffusion Problems*. Defense on June 1<sup>st</sup> 2011
- Andrea Fugazzola: Ph.D. in Mathematics and Statistics, University of Pavia. Title of the dissertation: *Higher integrability results for singular and degenerate parabolic equations*. Defense on December 16<sup>th</sup> 2011.

- Simona Puglisi: Ph.D. in Mathematics, University of Catania. Title: *Regularity results for some elliptic and parabolic problems*. Defense on February 27<sup>th</sup> 2012.

### Activity in Selection Committees

- From August 2011 to January 2012 I was member of the Selection Committee for a position of Assistant Professor in Mathematical Analysis at the Faculty of Sciences of the University of Como.
- In April–June 2015 I was member of the Selection Committee for a position of Senior Assistant Professor (RTD-b) in Mathematical Analysis at the Department of Mathematics of the Polytechnics of Milan.
- From November 2016 to February 2017 I was member of the Selection Committee for a position of Senior Assistant Professor (RTD-b) in Mathematical Analysis at the Department of Basic and Applied Sciences for Engineering at Sapienza University of Rome.
- In November–December 2019 I chaired the Selection Committee for a position of Senior Assistant Professor (RTD-b) in Mathematical Analysis at the Department of Mathematics at the University of Pavia.
- In October–December 2020 I chaired the Selection Committee for a position of Associate Professor in Mathematical Analysis at the Department of Mathematics at the University of Pavia.
- From October 2020 to March 2021 I was part of the Selection Committee for a position of Junior Assistant Professor in Mathematical Analysis at the Department of Mathematics at the University of Padua.
- Since May 2024 I have chaired the Selection Committee for a position of Full Professor in Mathematical Analysis at the Department of Mathematics at the University of Milan.

### Academic Organizational Activity

- From November 1<sup>st</sup> 2010 to October 31<sup>st</sup> 2013 I was vice–chair of the Department of Mathematics “Felice Casorati” of the University of Pavia.
- From December 13<sup>th</sup> 2010 to March 31<sup>st</sup> 2013 I was President of the Scientific Committee of the Library of Science and Technique of the University of Pavia.
- From February 11<sup>th</sup> to May 31<sup>st</sup> 2013 I was Director of the five-year undergraduate program in Building Engineering and Architecture at the School of Engineering of the University of Pavia.
- From September 20<sup>th</sup> 2013 to September 30<sup>th</sup> 2014 I represented the Second Scientific Library Committee (CSB2) in the University Library Committee of the University of Pavia.

- From November 1<sup>st</sup> 2013 to September 30<sup>th</sup> 2019 I was the Chair of the Department of Mathematics of the University of Pavia.
- From November 1<sup>st</sup> 2013 to September 30<sup>th</sup> 2019 I was member of the Executive Committee of the School of Engineering of the University of Pavia.
- From November 15<sup>th</sup> 2013 to September 30<sup>th</sup> 2019 I was Coordinator of the Conference of the Chairs of the University of Pavia.

## Scientific Organizational Activity

- 2012
  - With E. DiBenedetto (Vanderbilt University) I organized a mini-symposium on “Degenerate and Singular Elliptic and Parabolic Equations” during the 36<sup>th</sup> Annual SIAM Southeastern Atlantic Section Conference, which was held in Huntsville, Alabama from March 24<sup>th</sup> to March 25<sup>th</sup>.
  - With F. Brezzi (IUSS Pavia), P. Colli Franzone (University of Pavia), G. Gilardi (University of Pavia), I was Editor of the Proceedings of the Conference “Analysis and Numerics of Partial Differential Equations” held in Pavia at the beginning of November 2011 in memory of Enrico Magenes. The proceedings appeared in 2013 in the Springer INdAM Series (see [3] in third section of the complete list of publications).
- 2013
  - With P. Colli (University of Pavia), M. Grasselli (Politecnico of Milan) and V. Pata (Politecnico of Milan) I was part of the Organizing Committee of the *Ninth Colloquium University of Pavia - Politecnico of Milan: Partial Differential Equations and Calculus of Variations*, which took place in Pavia on May 23<sup>rd</sup>.
- 2014
  - With F. Duzaar (University of Erlangen-Nürnberg) I organized an *INdAM Meeting on Degenerate and Singular Parabolic Problems*, held in Cortona, Italy, from June 23<sup>rd</sup> to June 27<sup>th</sup>.
- 2021
  - With M. R. Lancia (Sapienza University of Rome), P. Marcellini (University of Florence) and G. Vinti (University of Perugia) I organized a *GNAMPA Workshop on “Advances in Evolution Equations and Applications”*, held in Pavia, Italy, from September 24<sup>th</sup> to September 25<sup>th</sup>.
- 2023
  - With S. Bertoluzza, P. Pietra, L. Spinolo (IMATI-CNR, Pavia), and S. Gualandi, A. Moiola, G. Schimperna (University of Pavia) I organized a *Workshop on “Boundary Value Problems and Applications - the legacy of Enrico Magenes”*, held in Pavia, Italy, on November 21<sup>st</sup>.
- 2024

- With V. Bögelein (University of Salzburg, Austria), J. Kinnunen (Aalto University, Finland) and K. Nyström (University of Uppsala, Sweden) I organized the *IML Workshop on “Nonlinear Parabolic PDEs”*, held at the Institut Mittag-Leffler, Stockholm, Sweden, from May 20<sup>th</sup> to May 24<sup>th</sup>.
- 2025
  - With V. Bögelein (University of Salzburg, Austria), J. Kinnunen (Aalto University, Finland) and N. Liao (University of Salzburg, Austria) I am organizing an *ESI Workshop on “Degenerate and Singular PDEs”*, to be held at the Erwin Schrödinger Institute (ESI), Vienna, Austria, from February 24<sup>th</sup> to February 28<sup>th</sup>.

### Editorial Activity

- From April 20<sup>th</sup> 2014 to November 1<sup>st</sup> 2019 I was Editor in Chief of the *Central European Journal of Mathematics*, which in 2015 changed its name to *Open Mathematics*.
- From June 2021 to July 2022 I was Guest Editor of the Special Issue on *Degenerate and singular partial differential equations for Nonlinear Analysis* published by Elsevier.
- Since November 2015 I have been Editor of *Advances in Calculus of Variations*.

### Past and Present Funding

- 2009–2012 With the collaboration of Elena Bonetti and Fulvio Bisi, I set up the Laboratory of Applied Mathematics (LAMA) at the Mantova Campus of the School of Engineering of the University of Pavia, thanks to a grant of approximately 40.000 EUR from the Foundation “University of Mantova”. With a large part of the grant we could pay a two-year non-tenure track position of assistant professor at the Mantova Campus. In 2011 LAMA started a collaboration with Polimeri Europa (the ENI polymers division) for the modeling of industrial processes. Due to a sudden and unexpected closure of the Mantova Campus of the School of Engineering of the University of Pavia, LAMA was closed at the end of 2012.
- 2011–2013 Italian Ministry of Education, University and Research 2009 PRIN Project “Geometric Properties of Nonlinear Diffusion Problems”. I was scientific coordinator of a three-investigator research team. The amount of money at disposal of the group was EUR 6.309.
- 2014 “Singular and Degenerate Evolution Problems,” Italian INdAM Meeting. The amount of money at the organizers’ disposal (Frank Duzaar and myself) was EUR 15.000.

- 2018 During my term as chair of the Department of Mathematics, the Department was awarded a “Department of Excellence grant” by the Italian Ministry of University. The Department has EUR 6.635.000 at its disposal to spend from 2018 to 2022 hiring new faculty, organizing new teaching programs, buying scientific equipment. I supervised the first two years of the program, until the end of my term as chair.
- 2019 “Advances in Evolution Equations and Applications,” one-day Meeting. INdAM granted to the organizers’ (Maria Rosaria Lancia, Paolo Marcellini, Gianluca Vinti and myself) EUR 1.000. Due to covid-19 pandemic, the meeting was cancelled, and the money was given back.
- 2020 “Advances in Evolution Equations and Applications,” one-day Meeting. INdAM granted to the organizers’ (Maria Rosaria Lancia, Paolo Marcellini, Gianluca Vinti and myself) EUR 1.500. The Meeting took place at the end of September 2021.

### Recent Invited Talks at Conferences and Scientific Meetings

- 2011
  - IV Pini Memorial (Bologna, Italy, November 25); “On the Local Behavior of Non-Negative Solutions to a Logarithmically Singular Equation.”
- 2012
  - 2012 SIAM Southeast Atlantic Section Conference (Huntsville, AL, USA, March 24–25); “Logarithmically Singular Parabolic Equations as Limits of the Porous Medium Equation.”
  - 7<sup>th</sup> European Conference on Elliptic and Parabolic Problems (Gaeta, Italy, May 21–25); “On the local behavior of solutions of logarithmically singular parabolic equations.”
  - Workshop on “Recent Trends in Nonlinear Diffusion” (Centro De Giorgi, Pisa, Italy, July 1–6); “On the Local Behavior of Solutions to Logarithmically Singular Parabolic Equations.”
  - Workshop on “Calculus of Variations and Partial Differential Equations” (Erlangen, Germany, November 9); “Boundary Estimates for Certain Degenerate and Singular Parabolic Equations.”
  - Workshop on “New trends in Nonlinear Parabolic Equations” (Parma, Italy, November 12–16); “Boundary Estimates for Certain Degenerate and Singular Parabolic Equations.”
- 2013
  - Minisymposium on Dynamics of Non-linear Flows in Porous Media: Analysis and Applications - 2013 SIAM Conference on Mathematical and Computational Issues in the Geosciences (Padova, Italy, June 17–20); “On the regularity of Non-Negative Solutions to a Logarithmically Singular Equation.”

- Workshop on “Nonlinear Elliptic and Parabolic Partial Differential Equations” (Milan, Italy, June 19–21); “Boundary regularity for degenerate and singular parabolic equations.”
- Workshop on “Elliptic and Parabolic Equations” (Hannover, Germany, September 10–12); “Porous medium type equations with measure data and potential estimates.”
- Invited visitor at the Mittag-Leffler Institute for the Semester on “Evolution Problems” (Stockholm, Sweden, October 1–November 15 2013); “Analyticity of solutions to a singular diffusion equation” on October 10<sup>th</sup>.
- 2015
  - Meeting “Incontro con Marco Biroli” (Milan, Italy, May 9); “Un criterio di tipo Wiener per la continuità al bordo di Quasi-Minimi.”
  - Conference on “PDEs, Potential Theory and Function Spaces in honour of Lars Inge Hedberg (1935-2005)” (Linköping, Sweden, June 14–18); “A Necessary and Sufficient Condition for the Continuity of Local Minima of Parabolic Variational Integrals with Linear Growth.”
- 2016
  - Workshop on “The Total Variation Flow and Related Nonlinear Evolution Problems” (Salzburg, Austria, July 11–15); “A self-improving property of degenerate parabolic equations of porous medium-type.”
- 2017
  - Workshop on “Harnack’s Inequalities and nonlinear operators” (Cortona, Italy, June 19); “A Short Presentation of Emmanuele DiBenedetto’s Work.”
  - Conference on “Recent developments in Nonlinear Partial Differential Equations and Applications” (TIFR CAM, Bangalore, India, November 1–4); “A self-improving property of degenerate parabolic equations of porous medium-type.”
- 2018
  - Meeting on “New Trends in PDEs” (Catania, Italy, May 29–30); “A Boundary Estimate for Singular Diffusion Equations.”
- 2019
  - Workshop “One-Day Workshop on PDEs” (Roma, Italy, May 28); “Boundary Regularity for the Porous Medium Equation.”
- 2022
  - Workshop “Advances in Calculus of Variations” (Naples, Italy, June 13–17); “Local Bounds of the Gradient of Weak Solutions to the Porous Medium Equation.”
  - Workshop “Aemilian Variations” (Parma, Italy, November 11); “Continuity of the temperature in multi-phase transition problems.”
- 2023
  - Workshop “Regularity aspects in nonlinear PDEs” (Naples, Italy, February 27–28); “Carleson Estimates for the Singular Parabolic  $p$ -Laplacian in Time-dependent Domains.”

- 2024
  - “First Chinese-Italian Workshop on Elliptic PDEs and Variational Problems” (Huangshan City, Anhui province, China, June 2–8); “Boundary Behavior of Functions in De Giorgi Classes Defined in Non-smooth Domains.”

### Recent Invited Talks at Mathematics Departments

- The Logarithmic Diffusion Equation and its Connections with the Singular Porous Medium Equation - Kolloquium Angewandte Mathematik, Universität Erlangen–Nürnberg, Erlangen, Germany, May 16<sup>th</sup>, 2013.
- Porous Medium Equation and Potential Estimates - The Mathematical Colloquium, Linköping University, Linköping, Sweden, October 23<sup>rd</sup>, 2013.
- Boundary Regularity for Degenerate and Singular Parabolic Equations - Vanderbilt University, USA, February 20<sup>th</sup>, 2015.
- The Expansion of Positivity: Old and New - The Mathematical Colloquium, Linköping University, Linköping, Sweden, September 9<sup>th</sup>, 2015.
- The Continuity Issue for the Parabolic  $p$ -Laplacian: Old and New Results, Chongqing University, Chongqing, China, March 16<sup>th</sup>, 2017.
- A self-improving property of degenerate parabolic equations of porous medium-type - The Mathematical Colloquium, Linköping University, Linköping, Sweden, September 6<sup>th</sup>, 2017.
- On the Harnack Inequality for Non-divergence Parabolic Equations - Colloquium, TIFR Centre for Applicable Mathematics, Bangalore, India, January 30<sup>th</sup>, 2020.
- A Boundary Estimate for Quasi-Linear Diffusion Equations, Nonlinear PDE seminar, University of California at Irvine Mathematics, Irvine, USA, April 2<sup>nd</sup>, 2021 (online).
- Boundary behavior of non-negative solutions to degenerate and singular parabolic equations in non smooth domains, The Mathematical Colloquium, Paris Lodron Universität Salzburg, Salzburg, Austria, May 19<sup>th</sup>, 2022.
- Gradient Estimates for the Mean Curvature of Graphs, Fachbereich Mathematik, Paris Lodron Universität Salzburg, Salzburg, Austria, March 14<sup>th</sup>, 2024.



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## Complete List of Publications

### Papers

79. U. Gianazza and N. Liao, Continuity of the temperature in a multi-phase transition problem. Part II - *Preprint (2021)*, 1–47, to appear in *Interfaces Free Bound.*
78. U. Gianazza and N. Liao, Continuity of the temperature in a multi-phase transition problem. Part III - *J. Anal. Math.* 150, (2023), 583–607.
77. U. Gianazza and J. Siljander, Local Bounds of the Gradient of Weak Solutions to the Porous Medium Equation, *Partial Differ. Equ. Appl.* 4, 8 (2023).
76. U. Gianazza, Carleson estimates for the singular parabolic  $p$ -Laplacian in time-dependent domains, *Atti Accad. Naz. Lincei Cl. Sci. Fis. Mat. Natur.* 32(4) (2021), 669–690.
75. U. Gianazza, In memoriam Emmanuele DiBenedetto (1947–2021), *Adv. Calc. Var.*, (2021), 1–18.
74. U. Gianazza and N. Liao, Continuity of the temperature in a multi-phase transition problem, *Math. Ann.*, 384, (2022), 1–35.
73. D. Andreucci and U. Gianazza, A Short Presentation of Emmanuele’s Work, in V. Vespi et al., (eds.), *Harnack Inequalities and Nonlinear Operators. Springer INdAM Series, vol 46. Springer, Cham. 2021.*
72. U. Gianazza and N. Liao, A Boundary Estimate for Singular Sub-Critical Parabolic Equations, *Int. Math. Res. Notices*, (2020), 10, 7332–7353.
71. U. Gianazza and S. Salsa, On the Harnack Inequality for Non-divergence Parabolic Equations, *Mathematics in Engineering*, 3(3) (2020), 1–11.
70. F. Rossella, V. Bellani, M. Tommasini, U. Gianazza, E. Comini, C. Soldano, 3D Multi-Branched SnO<sub>2</sub> Semiconductor Nanostructures as Optical Waveguides, *Materials*, (2019), 12, 3148, 1–9.
69. U. Gianazza and C. Klaus,  $p$ -Parabolic Approximation of Total Variation Flow Solutions, *Indiana Univ. Math. J.*, 68(5) (2019), 1519–1550.
68. U. Gianazza and S. Schwarzacher, Self-improving property of the fast diffusion equation, *J. Funct. Anal.*, 277(12), (2019), 1–57.

67. U. Gianazza and S. Schwarzacher, Self-improving property of degenerate parabolic equations of porous medium-type, *Amer. J. Math.*, 141(2), (2019), 399–446.
66. U. Gianazza and N. Liao, A Boundary Estimate for Degenerate Parabolic Diffusion Equation, *Potential Anal.*, 1–19, (2019).
65. A. Björn, J. Björn, U. Gianazza and J. Siljander, Boundary regularity for the porous medium equation, *Arch. Ration. Mech. Anal.*, 230(2), (2018), 493–538.
64. U. Gianazza, N. Liao and T. Lukkari, A Boundary Estimate for Singular Parabolic Diffusion Equations, *NoDEA Nonlinear Differential Equations Appl.*, 25(4), (2018).
63. E. DiBenedetto, U. Gianazza and V. Vespri, Remarks on Local Boundedness and Local Hölder Continuity of Local Weak Solutions to Anisotropic  $p$ -Laplacian Type Equations, *J. Elliptic Parabol. Equ.*, 2, (2016), 157–169.
62. U. Gianazza and S. Salsa, On the Boundary Behaviour of Solutions to Parabolic Equations of  $p$ -Laplacian Type, *Rend. Istit. Mat. Univ. Trieste*, 48, (2016), 463–483.
61. F. Duzaar, V. Bögelein and U. Gianazza, Sharp boundedness and continuity results for the singular porous medium equation, *Israel J. Math.*, 214, (2016), 259–314.
60. E. DiBenedetto and U. Gianazza, Some Properties of DeGiorgi Classes, *Rend. Istit. Mat. Univ. Trieste*, 48, (2016), 245–260.
59. A. Björn, J. Björn and U. Gianazza, The Petrovskiĭ criterion and barriers for degenerate and singular  $p$ -parabolic equations, *Math. Ann.*, 368, (2017), 885–904.
58. F.G. Düzgün, U. Gianazza and V. Vespri, 1-Dimensional Harnack Estimates, *Discrete Contin. Dyn. Syst. Ser. S*, 9(3), (2016), 675–685.
57. E. DiBenedetto, U. Gianazza and C. Klaus, A Necessary and Sufficient Condition for the Continuity of Local Minima of Parabolic Variational Integrals with Linear Growth, *Adv. Calc. Var.* 10(3), (2017), 209–221.
56. B. Avelin, U. Gianazza and S. Salsa, Boundary Estimates for Certain Degenerate and Singular Parabolic Equations, *J. Eur. Math. Soc.* 18, (2016), 381–424.
55. E. DiBenedetto and U. Gianazza, A Wiener-Type Condition for Boundary Continuity of Quasi-Minima of Variational Integrals, *Manuscripta Math.* 149, (2016), 339–346.
54. F. Duzaar, V. Bögelein and U. Gianazza, Very weak solutions of singular porous medium equations with measure data, *Commun. Pure Appl. Anal.*, 14(1), (2015), 23–49.
53. U. Gianazza, Degenerate and Singular Porous Medium Type Equations with Measure Data, in *J. Escher et al., (eds.), Elliptic and Parabolic Equations, Springer Proc. Math. Stat.*, 119, (2015), 139–158.

52. F. Duzaar, V. Bögelein and U. Gianazza, Continuity estimates for porous medium type equations with measure data, *J. Funct. Anal.*, 267(9), (2014), 3351–3396.
51. A. Björn, J. Björn, U. Gianazza and M. Parviainen, Boundary regularity for degenerate and singular parabolic equations, *Calc. Var. Partial Differential Equations*, 52(3), (2015), 797–827.
50. E. DiBenedetto, U. Gianazza and N. Liao, Two Remarks on the Local Behavior of Solutions to Logarithmically Singular Diffusion Equations and its Porous-Medium Type Approximations, *Riv. Mat. Univ. Parma*, vol. 5(1), (2014), 139–182.
49. V. Bögelein, F. Duzaar, U. Gianazza, Porous Medium Type Equations with Measure Data and Potential Estimates, *SIAM J. Math. Anal.*, 45(6), (2013), 3283–3330.
48. U. Gianazza, List of Mathematical Works Authored or Edited by Enrico Magenes, in *F. Brezzi et al., (eds.), Analysis and Numerics of Partial Differential Equations. Springer INdAM Series, vol 4. Springer, Milano, 2013.*
47. E. Dallago, D.G. Finarelli, U. Gianazza, A. Lazzarini Barnabei and A. Liberale, Theoretical and experimental analysis of an MPP detection algorithm employing a single voltage sensor only and a noisy signal, *Power Electronics, IEEE Transactions on*, 28(11), 2013, 5088–5097.
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