Curriculum Vitae
Anatoli F.Tedeev

Head of Department of Equations of Mathematical Physics of National Academy of Sciences of Ukraine
Born: May 29, 1955 Java, Georgia
Zamoskvorechnaya 27, apart.31
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Education and Degrees:

1998, Doctor in mathematical sciences, Institute of Appl. Mathematics and Mechanics,
Donetsk, Ukraine
1985, Ph.D. in mathematics, Institute of Appl. Mathematics and Mechanics,
Donetsk, Ukraine

Professional Experience:

1989- present, senior researcher, Institute of Appl. Mathematics and Mechanics,
Donetsk, Ukraine
1981-1989, assistent professor, Politechnical institute of Donetsk, Donetsk, Ukraine
1978-1981, post-graduate student, Leningrad State University, Leningrad,
Russia
1973-1978, graduate student, North Ossetian State University, Ordzhonikidze, Russia

Publications and Conference Talks:

52 papers in refereed mathematical journals, 20 conference talks

Research Interests:

Partial Differential Equations of Elliptic and Parabolic Types; Degenerate and Singular Equations with nonlinear sources; Local and Global behaviour of Solutions on Unbounded domains with Non Compact boundaries.

Students

PhD students
N. Afanas'eva
A. Martynenko
O. Boldovskaya
V. Markasheva
T. Sanikidze
Doctor degree student
S. Degtyarev

Lectures and Colloquia

1994

01.08-12.08-participant of ICM 94- International Congress of Mathematicians, Zurich, Switzerland

16.11-16.12-visiting professor, Departement of Mathematics of University of Catania

1995

02.07-0.8.07-participant of Third International Congress of Industrial and Applied Mathematics, Hamburg, Germany, July 3-7, 1995

01.12-21.12-visiting professor, Departement of Mathematics of University of Catania

1996

18.03-23.04-visiting professor, University U. Dini of Florence

1997

01.05-01.06-visiting professor, University U. Dini of Florence

1998

27.09-18.12-visiting professor, Engineering Faculty of University "La Sapienza", Rome

1999

24.06-03.07-participant of the Conference dedicated to the memory of S.N. Kruzhkov, Besancon

03.99-06.08-visiting professor, Departement of Mathematics of University of Catania

2000

01.02-04.04-visiting professor, University U. Dini of Florence and University of Trieste

01.11-01.12-visiting professor, Engineering Faculty of University "La Sapienza", Rome

2003

01.03-10.01.05-visiting professor, Engineering Faculty of University "La Sapienza", Rome

2004

21.11-10.12-visiting professor, Department of Mathematics of Tel-Aviv University

2005

10.05-10.07-visiting professor, Engineering Faculty of University "La Sapienza", Rome

2006

28.02-16.03-visiting professor, Engineering Faculty of University "La Sapienza", Rome

01.06-29.06-visiting professor, Department of Mathematics of Tel-Aviv University

2008

01.05-10.05-visiting professor, Department of Mathematics of University of Swansea

10.05-11.06-visiting professor, Engineering Faculty of University "La Sapienza", Rome

2011

07.10-06.11-visiting professor, Engineering Faculty of University "La Sapienza", Rome

2013

20.01-20.03-visiting professor, Engineering Faculty of University "La Sapienza", Rome

List of publications:

1. Sanikidze, Tariel A.; Tedeev, Anatoli F. On the temporal decay estimates for the degenerate parabolic system. Commun. Pure Appl. Anal. 12 (2013), no. 4, 1755–1768.

2. Martynenko, A. V.; Tedeev, A. F.; Shramenko, V. N. The Cauchy problem for a degenerate parabolic equation with inhomogenous density and a source in the class of slowly vanishing initial functions. (Russian) Izv. Ross. Akad. Nauk Ser. Mat. 76 (2012), no. 3, 139–156; translation in Izv. Math. 76 (2012), no. 3, 563–580

3. Degtyarev, Sergei P.; Tedeev, Anatolii F. On the solvability of the Cauchy problem with growing initial data for a class of anisotropic parabolic equations. (Russian) Ukr. Mat. Visn. 8 (2011), no. 3, 356–380, 461; translation in

J. Math. Sci. (N. Y.) 181 (2012), no. 1, 28–46,

4. Markasheva V. A. and Tedeev A.F. The Cauchy problem for a quasilinear parabolic equation with a gradient absorption. Sbornik: Mathematics 203:3 (2012), 1-31

5. Tedeev, A. F. Universal bounds for positive solutions of doubly degenerate parabolic equations with a source.

Acta Math. Univ. Comenian. (N.S.) 80 (2011), no. 2, 229–242.

6. Sanikidze, Tariel A.; Tedeev, Anatolii F. A bound for the supports of solutions of some classes

of evolution systems and equations. (Russian) Ukr. Mat. Visn. 7 (2010), no. 3, 369–383, 436;

translation in J. Math. Sci. (N. Y.) 175 (2011), no. 2, 161–172

7. Cianci, P.; Martynenko, A. V.; Tedeev, A. F. The blow-up phenomenon for degenerate parabolic

equations with variable coefficients and nonlinear source.

Nonlinear Anal. 73 (2010), no. 7, 2310–2323,

8. Boldovskaya, Ol'ga M.; Tedeev, Anatolii F. Estimates for the maximum of the solution of the

Neumann problem for quasilinear parabolic equations in unbounded domains narrowing

at infinity: the rapid diffusion case. (Russian) Ukr. Mat. Visn. 6 (2009), no. 1, 16–38, 136;

translation in Ukr. Math. Bull. 6 (2009), no. 1, 15–36

9. Markasheva, V. A.; Tedeev, A. F. Local and global estimates for solutions of the Cauchy problem for

quasilinear parabolic equations with a nonlinear operator of Baouendi-Grushin-type. (Russian) Mat. Zametki 85 (2009), no. 3, 395–407; translation in Math. Notes 85 (2009), no. 3-4, 385–396

10. Eidelman, S. D.; Kamin, S.; Tedeev, A. F., On stabilization of solutions of the Cauchy problem for linear degenerate parabolic equations.// Adv. Differential Equations.- 14 (2009).- No. 7-8.- P.621–641.

11. Martynenko, A. V.; Tedeev, A. F. On the behavior of solutions of the Cauchy problem for a degenerate parabolic equation with nonhomogeneous density and a source. (Russian) Zh. Vychisl. Mat. Mat. Fiz. 48 (2008), no. 7, 1214–1229; translation in Comput. Math. Math. Phys. 48 (2008), no. 7, 1145–1160

12. Martynenko, Aleksandr V.; Tedeev, Anatolii F. Regularity of solutions

of degenerate parabolic equations with nonhomogeneous density. (Russian) Ukr. Mat. Visn. 5 (2008),

no. 1, 116–145, 151; translation in Ukr. Math. Bull. 5 (2008), no. 1, 117–145

13. Andreucci D.; Tedeev, A. F., Large time behaviour for degenerate parabolic equations with convection.//

Asymptot. Anal.- 60 (2008).- No. 3-4.- P.227–247.

14. A.F. Tedeev. The interface blow-up phenomenon and local estimates for doubly degenerate parabolic equations.// Applicable Analyses, v. 86, no. 6 (2007),- P.755-782.

15. Degtyarev, S. P.; Tedeev, A. F., L_1–L_\infty estimates for the solution of the Cauchy problem for an anisotropic degenerate parabolic equation with double nonlinearity and growing initial data.//

Sb. Math. 198 (2007), No. 5-6.- P.639–660

16. Martynenko A.V. ; Tedeev A.F. , Cauchy problem for a quasilinear parabolic equation with a source

an an inhomogenous density.// Computational Mathematics and Mathematical Physics, v. 47,- No. 2 (2007),-P. 238-248.

17. S.P. Degtyarev, T.A. Sanikidze, A.F. Tedeev. On the finite speed of propagation of solutions for a some

evolutionary system which appears in Bean's theory of semiconductor, Dopovidi Nazional'noi Akademii Nauk

Ukrainy, 3, (2007), 7-13.

18. S.P. Degtyarev and A.F. Tedeev. L_1 -L_infty estimates of solutions of the Cauchy problem for an anisotropic degenerate parabolic equation with double nonlinearity and growing initial data, Sbornik: Mathematics,

198:5 (2007), 639-660.

19. S.P. Degtyarev and A.F. Tedeev. Estimates of solutions of the Cauchy problem for doubly nonlinear equation

with anisotropic degeneration and with growing initial data, Doklady Academii Nauk, V. 417, no. 2, (2007), 1-4.

20. S.P. Degtyarev and A.F. Tedeev. Bilateral estimates for the support of a solution of the Cauchy problem for

an anisotropic quasilinear degenerate equation, Ukrainian Mathematical Journal, V. 58, no. 11, (2006),12-22

21.Tedeev, A. F. Initial-boundary value problems for quasilinear degenerate parabolic equations

with damping. The Neumann problem. (Russian) Ukrain. Mat. Zh. 58 (2006), no. 2, 272–282;

translation in Ukrainian Math. J. 58 (2006), no. 2, 304–317

22.Afanas'eva, N. V.; Tedeev, A. F. Theorems on the existence and nonexistence of solutions to

the Cauchy problem for degenerate parabolic equations with a nonlocal source. (Russian)

Ukrain. Mat. Zh. 57 (2005), no. 11, 1443–1464; translation in Ukrainian Math. J. 57 (2005),

no. 11, 1687–1711

23.Samoilenko, A. M.; Mitropolskii, Yu. O.; Korolyuk, V. S.; Lukovskii,I. O.; Berezanskii, Yu. M.;

Khruslov, E. Ya.; Gorbachuk, M. L.; Kovalov, O. M.; Kim, G. S.; Kushnir, R. M.; Bazalii, B. V.;

Shishkov, A.E.; Kovalevskii, O. A.; Tedeev, A. F.; Mikhailets, V. A.; Antonyuk, O. Val.;

Antonyuk, O. Vikt.; Sidenko, M. R. Igor Volodimirovich Skripnik. (Ukrainian)

Ukrain. Mat. Zh. 57 (2005), no. 7, 1007–1009.

24.Andreucci, Daniele; Tedeev, Anatoli F. Universal bounds at the blow-up time for nonlinear

parabolic equations. Adv. Differential Equations 10 (2005), no. 1, 89–120.

25.Andreucci, D.; Tedeev, A. F.; Ughi, M. The Cauchy problem for degenerate parabolic equations

with source and damping. Ukr. Mat. Visn. 1 (2004), no. 1, 1–19; translation in Ukr. Math.

Bull. 1 (2004), no. 1, 1–23

26.Afanaseva, N. V.; Tedeev, A. F. Fujita-type theorems for quasilinear parabolic equations in

the case of slowly vanishing initial data. (Russian) Mat. Sb. 195 (2004), no. 4, 3–22;

translation in Sb. Math. 195 (2004), no. 3-4, 459–478

27.Tedeev, A. F. Conditions for the time-global existence and nonexistence of a compact support

of solutions of the Cauchy problem for quasilinear degenerate parabolic equations.

(Russian) Sibirsk. Mat. Zh. 45 (2004), no. 1, 189–200; translation in Siberian Math. J.

45 (2004), no. 1, 155–164

28.Andreucci, D.; Cirmi, G. R.; Leonardi, S.; Tedeev, A. F. Large time behavior of solutions to

the Neumann problem for a quasilinear second order degenerate parabolic equation in domains

with noncompact boundary. J. Differential Equations 174 (2001), no. 2, 253–288.

29.Andreucci, Daniele; Tedeev, Anatoli F. Finite speed of propagation for the thin-film

equation and other higher-order parabolic equations with general nonlinearity.

Interfaces Free Bound. 3 (2001), no. 3, 233–264.

30.Andreucci, Daniele; Tedeev, Anatoli F. Sharp estimates and finite speed of propagation for

a Neumann problem in domains narrowing at infinity. Adv. Differential Equations 5 (2000),

no. 7-9, 833–860.

31.Bonafede, S.; Cirmi, G. R.; Tedeev, A. F. Finite speed of propagation for the porous media

equation with lower order terms. Discrete Contin. Dynam. Systems 6 (2000), no. 2, 305–314.

32.Andreucci, Daniele; Tedeev, Anatoli F. A Fujita type result for a degenerate Neumann problem

in domains with noncompact boundary. J. Math. Anal. Appl. 231 (1999), no. 2, 543–567.

33. Andreucci, Daniele; Tedeev, Anatoli F. Optimal bounds and blow up phenomena for parabolic

problems in narrowing domains. Proc. Roy. Soc. Edinburgh Sect. A 128 (1998), no. 6,

1163–1180.

34. Bonafede, S.; Cirmi, G. R.; Tedeev, A. F. Finite speed of propagation for the porous media

equation. SIAM J. Math. Anal. 29 (1998), no. 6, 1381–1398.

35.Skrypnik, I. I.; Tedeev, A. F. Local estimates for the solution of the Cauchy problem for

a second-order quasilinear parabolic equation. The weighted case. I. (Russian) Sibirsk.

Mat. Zh. 38 (1997), no. 1, 193–207, iv; translation in Siberian Math. J. 38 (1997),

no. 1, 165–178

36.Tedeev, A. F. Local and global properties of solutions of the Cauchy-Dirichlet problem for

a second-order quasilinear parabolic equation in an unbounded domain. (Russian)

Differ. Uravn. 32 (1996), no. 8, 1071–1077, 1149; translation in Differential Equations

32 (1996), no. 8, 1075–1082

37. Tedeev, A. F. Two-sided estimates for the solution of the Neumann problem as $t\to\infty$

for a second-order quasilinear parabolic equation. (Russian) Ukrain. Mat. Zh. 48 (1996),

no. 7, 989–998; translation in Ukrainian Math. J. 48 (1996), no. 7, 1119–1130

38. Bazalii, B. V.; Tedeev, A. F. A method of symmetrization and estimation of the solutions

of the Neumann problem with an unbounded increase in time for an equation of a porous

medium in domains with a noncompact boundary. (Russian) Ukrain. Mat. Zh. 47 (1995),

no. 2, 147–157; translation in Ukrainian Math. J. 47 (1995), no. 2, 173–186

39.Tedeev, A. F. An estimate for the rate of stabilization of the solution of the first

initial-boundary value problem for the porous medium equation in an unbounded domain.

(Russian) Mat. Zametki 57 (1995), no. 3, 473–476; translation in Math. Notes 57 (1995),

no. 3-4, 329–331

40.Tedeev, A. F. Qualitative properties of solutions of the Neumann problem for a higher-order

quasilinear parabolic equation. (Russian) Ukrain. Mat. Zh. 45 (1993), no. 11, 1571–1579;

translation in Ukrainian Math. J. 45 (1993), no. 11, 1767–1778 (1994)

41.Bazalii, B. V.; Tedeev, A. F. Symmetrization and initial-boundary value problems for some

classes of second-order nonlinear parabolic equations. (Russian) Ukrain. Mat. Zh. 45 (1993),

no. 7, 884–892; translation in Ukrainian Math. J. 45 (1993), no. 7, 976–986 (1994)

42.Tedeev, A. F. Stabilization of solutions of initial-boundary value problems for quasilinear

parabolic equations. (Russian) Ukrain. Mat. Zh. 44 (1992), no. 10, 1441–1450;

translation in Ukrainian Math. J. 44 (1992), no. 10, 1325–1334

43.Bazalii, B. V.; Tedeev, A. F. Estimates for the stabilization rate of some problems with a

free boundary. (Russian) Ukrain. Mat. Zh. 44 (1992), no. 10, 1299–1306;

translation in Ukrainian Math. J. 44 (1992), no. 10, 1189–1196

44.Tedeev, A. F. Multiplicative inequalities in domains with a noncompact boundary. (Russian)

Ukrain. Mat. Zh. 44 (1992), no. 2, 260–268; translation in Ukrainian Math. J. 44 (1992),

no. 2, 228–235

45.Tedeev, A. F. Estimates for the rate of stabilization as $t\to\infty$ of the solution of

the second mixed problem for a second-order quasilinear parabolic equation. (Russian)

Differentsialnye Uravneniya 27 (1991), no. 10, 1795–1806, 1838; translation in

Differential Equations 27 (1991), no. 10, 1274–1283

46.Tedeev, A. F. Stabilization of the solution of the third mixed problem for second-order

quasilinear parabolic equations in a noncylindrical domain. (Russian) Izv. Vyssh. Uchebn.

Zaved. Mat. 1991, , no. 1, 63–73; translation in Soviet Math. (Iz. VUZ) 35 (1991),

no. 1, 75–87

47.Tedeev, A. F. Two-sided estimates for the rate of stabilization of the solution of the

second mixed problem for a second-order quasilinear parabolic equation. (Russian)

Dokl. Akad. Nauk Ukrain. SSR 1991, no. 4, 11–14, 157.

48.Tedeev, A. F. Stabilization of solutions of the first mixed problem for a higher-order

quasilinear parabolic equation. (Russian) Differentsialnye Uravneniya 25 (1989),

no. 3, 491–498, 549; translation in Differential Equations 25 (1989), no. 3, 346–352

49.Tedeev, A. F.; Shishkov, A. E. Behavior of solutions and subsolutions of quasilinear

parabolic equations in unbounded domains and in the neighborhood of a boundary point.

(Russian) Izv. Vyssh. Uchebn. Zaved. Mat. 1985, no. 9, 77–79, 83.

50.Tedeev, A. F.; Shishkov, A. E. Behavior of solutions of quasilinear elliptic equations in

unbounded domains. (Russian) Dokl. Akad. Nauk Ukrain. SSR Ser. A 1984, no. 9, 23–27, 86.

51.Tedeev, A. F.; Shishkov, A. E. The Saint-Venant and Phragmen-Lindelof principle for

solutions and subsolutions of quasilinear equations of elliptic type in unbounded domains.

(Russian) Mat. Fiz. Nelinein. Mekh. No. 2(36) (1984), 91–98, 104.

52.Tedeev, A. F.; Shishkov, A. E. Qualitative properties of solutions and subsolutions of

quasilinear elliptic equations. (Russian) Izv. Vyssh. Uchebn. Zaved. Mat. 1984,

no. 1, 62–68.

Professional activities:

Co-organiser of international conferences NPDE; 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2010, 2013

Member of Editorial Board ;
2000-pres. Nonlinear Boundary-value Problems
2000-pres. Transactions of IAMM