Hayk Nersisyan

Curriculum Vitae

PERSONAL DETAILS

Birth	May 14, 1985
Address	40 M. Baghramyan ave, Yerevan
Phone	(374) 60612698
Mail	`hnersisyan@aua.am`
Civil status	Married, 3 child
Nationality	Armenian

RESEARCH INTEREST

- **Control of PDEs** (Euler, Schrodinger and Navier–Stokes equations, approximate, exact controllability, stabilization, Lyapunov methods, infinite-dimensional geometric control, ...).
- **Machine learning** (Audio Signal Processing, Voice Recognition, Voice generation, Computer Vision, Recommender System, ...)

EDUCATION

PhD in Mathematics 2007-2011
University of Cergy–Pontoise

Title of the thesis: *Controllability and stabilization of compressible and incompressible Euler equation.*

MSc. in Mathematics 2005-2007
Yerevan State University

BSc. in Mathematics 2001-2005
Yerevan State University

WORK EXPERIENCE

Associate professor, Computer science program chair 2020-present
American University of Armenia (AUA)

Assistant professor, Computer science program chair 2015-2020
American University of Armenia (AUA)

Software Engineer 2013-2015
Seven Smarts LLC

Adjunct assistant professor 2013-2015
American University of Armenia (AUA)

Postdoctoral Fellow 2012-2013
BCAM, Bilbao, Spain

ATER (temporary teaching and research position) 2010-2011
University of Cergy–Pontoise, France

SKILLS

Languages	Armenian English French Russian
Software	C#, Python, C++, JavaScript, .Net, Matlab, LaTeX.

ARTICLES

H. Nersisyan, D. Piliposyan, R. Ghulghazaryan, M. Shoyan
Application of Machine Learning-Based Electrochemical Deposition Models to CMP Modeling Mathematical Problems of Computer Science , 2020

D. Piliposyan, R. Ghulghazaryan, M. Poghosyan, H. Nersisyan
Pressure calculation using obstacle problem for CMP modeling Journal of Physics: Conference Series, 2019

D. Piliposyan, R. Ghulghazaryan, M. Poghosyan, H. Nersisyan
Application of the Obstacle Problem to Pressure Calculation for CMP Modeling TPCM 2019 conference paper, 2019

H. Nersisyan, D. Dutykh and E. Zuazua
Generation of two-dimensional water waves by moving bottom disturbances, IMA Journal of Applied Mathematics 80 (4), 1235–1253, 2014

H. Nersisyan
Stabilization of the 2D incompressible Euler system in an infinite strip, Annales de l'Institut Henri Poincare (C) Non Linear Analysis 30(4):737–762, 2013.

H. Nersisyan
Approximate Controllability of inviscid compressible fluid flow, Journal of high matthematics, NPUA : 125–133, 2013.

V. Nersesyan and H. Nersisyan
Global exact controllability in infinite time of Schrödinger equation, J. Math. Pures et Appl., 97(4):295–317, 2012.

H. Nersisyan
Contrôlabilité et stabilisation des équations d'Euler incompressible et compressible, Proceeding of the University of Cergy-Pontoise, 2011.

H. Nersisyan
Controllability of the 3D compressible Euler system, Communications in Partial Differential Equations, 36(9) 1544 –1564, 2011.

H. Nersisyan
Controllability of 3D incompressible Euler equations by a finite-dimensional external force, ESAIM Control Optim. Calc. Var., 16(3):677 – 694, 2010

TALKS

- PhD students seminar, November 18, 2008, Cergy.
- GDR/GDRE, Control of PDEs (poster), January 25–29, 2010, CIRM, Marseille.
- Mathematical Institute seminar, April 28, 2010, Armenian Academy of Sciences.
- PDE seminar, May 25, 2010, Yerevan State University, Armenia.
- 10th French-Romanian Conference, August 26-31, 2010, Poitiers.
- PDE seminar, October 27, 2010, University of Surrey, United Kingdom.
- PDE seminar, November 4, University of Iasi, Romania,
- BCAM PDE Working group, June 2012.
- Second Aquitanie-Euskadi Workshop on Applied Mathematics October 2012.
- UCM, Madrid, PDE working group, November 2012.
- BCAM learning seminars, February 2013.
- Yerevan State University seminars, December 2014.
- Summer School in Mathematics, July 2015.
- Summer School in Mathematics, July 2016.
- Workshop on grading methods, AUA, December 2016
- Summer School in Mathematics, July 2017.
- ML workshop, Yerevan February 2020.

COURSES TAUGHT

- Functional analysis, Cergy-Pontoise, Frace
- Integral analysis, Cergy-Pontoise, Frace
- Probability, Cergy-Pontoise, Frace
- C2i: certificate of informatics and internet, Cergy-Pontoise, Frace
- Calculus 1, 2, 3 AUA, UFAR
- Calculus: Single Variable, Multi Variable, AUA
- Business Math, AUA
- Real analysis, AUA
- Discrete Mathematics, AUA
- Ordinary differential equations, AUA
- Partial differential equations, YSU

REFERENCES

Available upon request