

# CURRICULUM VITAE

Laurențiu Leuștean

## PERSONAL DATA

- Birth Date: January 16, 1971, Drobeta-Turnu Severin, Romania
- Nationality: Romanian
- Family status: Married to Ioana Leuștean, with whom I have three children (Maria, Andrei, Ștefan)
- Email: [laurentiu.leustean@unibuc.ro](mailto:laurentiu.leustean@unibuc.ro)
- Web page: <http://unibuc.ro/~lleustean/>
- Google Scholar: <http://scholar.google.ro/citations?user=Zju00-gAAAAJ&hl=en>

## AFFILIATION

Professor

Faculty of Mathematics and Computer Science, University of Bucharest,  
Academiei 14, P.O. Box 010014, Bucharest, Romania

and

Senior Researcher

Simion Stoilow Institute of Mathematics of the Romanian Academy (IMAR),  
P.O. Box 1-764, RO-014700, Bucharest, Romania

## EDUCATION

- May 16, 2013: Habilitation in Mathematics, IMAR, Romania
- October 16, 2009: Habilitation in Mathematics, Technische Universität Darmstadt, Germany
- May 19, 2004: PhD in Mathematics, University of Bucharest, Romania
- 1995 - 1996: Master in Computer Science, Faculty of Mathematics and Computer Science, University of Bucharest, Romania
- 1990-1995: Undergraduate Studies in Computer Science, Faculty of Mathematics and Computer Science, University of Bucharest, Romania

## EMPLOYMENT

- October 1, 2014 - present: Professor, Faculty of Mathematics and Computer Science, University of Bucharest, Romania
- January 1, 2014 - present: Senior Researcher, Simion Stoilow Institute of Mathematics of the Romanian Academy (IMAR), Bucharest, Romania
- October 1, 2003 - December 31, 2013: Scientific Researcher, Simion Stoilow Institute of Mathematics of the Romanian Academy (IMAR), Bucharest, Romania
- April 1, 2004 - October 31, 2009: Postdoctoral Position (Wissenschaftlicher Mitarbeiter), Department of Mathematics, Technische Universität Darmstadt, Germany
- June 1, 2000 - September 31, 2003: Researcher, National Institute for Research and Development in Informatics (ICI), Bucharest, Romania
- November 1, 1996 - May 31, 2000: Programmer, National Institute for Research and Development in Informatics (ICI), Bucharest, Romania

## ADMINISTRATIVE DUTIES

- January 2016 - present: Vice-Rector of the University of Bucharest and Director of ICUB (Research Institute of the University of Bucharest)
- December 2015 - present: Member of the Senate of the University of Bucharest

## AWARDS

- The 2010 Simion Stoilow Prize of the Romanian Academy (awarded in 2012)

## FELLOWSHIPS

- October 16, 2008 - February 13, 2009 and September 14 - October 31, 2009: Oberwolfach Leibniz Fellowship, Mathematisches Forschungsinstitut Oberwolfach, Germany
- April 27-29, 2006: Horizons of Truth: Logics, Foundations of Mathematics, and the Quest for Understanding the Nature of Knowledge. Gödel Centenary 2006. An International Symposium Celebrating the 100th Birthday of Kurt Gödel, Vienna, Austria  
Young Scholar Competition, chosen between the 10 scholars (out of 63 applicants) to attend the meeting and present their project proposals
- July 7 - September 14, 2003: NASA Ames/RIACS 2003 Summer Student Research Program (Second Year), organized by NASA Ames Research Center and the Research Institute for Advanced Computer Science (RIACS), Moffet Field, CA, USA
- June 10 - August 16, 2002: NASA Ames/RIACS 2002 Summer Student Research Program, organized by NASA Ames Research Center and the Research Institute for Advanced Computer Science (RIACS), Moffet Field, CA, USA
- January 8 - June 7, 2002: Marie Curie Fellowship (mobility research training grant from the European Community) at BRICS (Basic Re-

search in Computer Science) International PhD School, University of Aarhus, Denmark

## RESEARCH GRANTS

- Principal Investigator of the Grant *Proof mining in metric analysis, geometric group theory and ergodic theory*, Romanian National Authority for Scientific Research, CNCS-UEFISCDI, PN-II-ID-PCE-2011-3-0383, 2011 - 2016
- Mentor in the Grant *Topics in nonlinear analysis and ergodic theory on uniformly convex geodesic spaces*, CNCS - UEFISCDI Romania, PN-II-RU-PD-2012-3-0152, 2013 - 2015
- Member of the Grant *Optimized program synthesis from proofs*, CNCS Romania, PN-II-RU-TE-2011-3-0122, 2011 - 2013
- Member of Deutsch-Südafrikanisches Kooperationsprojekt *From continuity to computability*, DFG (Deutsche Forschungsgemeinschaft), 2007 - 2009
- Member of Deutsch-Russisches Kooperationsprojekt *Berechnungen über nicht diskreten Strukturen: Modelle, Semantik, Komplexität*, DFG (Deutsche Forschungsgemeinschaft), 2006 - 2008

## SCIENTIFIC VISITS

- October 16 - 20, 2017: University of Lisbon, Portugal (invited by Fernando Ferreira)
- September 16 - 20, 2016: Middlesex University London, UK (invited by Andrei Popescu)
- September 04 - 11, 2016: Université Paris-Est Créteil, France (invited by Cătălin Dima)
- April 01 - 08, 2013: Universidad de Sevilla, Spain (invited by Genaro López-Acedo)

- November 1 - 10, 2012: Technische Universität Darmstadt, Germany (invited by Ulrich Kohlenbach)
- April 19 - May 19, 2012: University of Illinois at Urbana-Champaign, USA (invited by Grigore Roşu)
- May 25 - June 14, 2010: Department of Mathematical Analysis, University of Seville, Spain (invited by Genaro López-Acedo)
- March 1 - April 15, 2007: Max Planck Institute for Mathematics, Bonn, Germany (participation at the Trimestre on Methods of Proof Theory)
- February 16 - 28, 2001: Dipartimento di Matematica e Informatica, Università' di Salerno, Italy (invited by Antonio Di Nola)

## PROFESSIONAL ACTIVITIES

- Member of:
  - American Mathematical Society (AMS) (2003 - present)
  - Association for Symbolic Logic (2004 - 2009 and 2013 - present )
  - Deutsche Vereinigung für Mathematische Logik und für Grundlagenforschung der Exakten Wissenschaften (DVMLG) (2010 - 2014)
- Reviewer for Mathematical Reviews (2007 - present) and Zentralblatt MATH (2010 - present )
- Refereeing for Journals or Publishers: Acta Applicandae Mathematicae, Advances in Nonlinear Analysis, Analele Stiintifice ale Universitatii Ovidius Constanta, Annals of the Alexandru Ioan Cuza University, Annals of Pure and Applied Logic, Annals of Functional Analysis, Computers and Mathematics with Applications, Fixed Point Theory and Applications, Foundations of Computational Mathematics, International Journal of Mathematics and Mathematical Sciences, Israel Journal of Mathematics, Journal of Advanced Mathematical Studies, Journal of Convex Analysis, Journal of Mathematical Analysis and Applications, Journal of Multiple-Valued Logic and Soft Computing,

Mathematical Reports, Mathematisches Zeitschrift, Nonlinear Analysis, Optimization, Proceedings of the Romanian Academy, Romanian Journal of Pure and Applied Mathematics, Rendiconti del Circolo Matematico di Palermo, SIAM Journal on Optimization, Soft Computing, Studia Logica, Vietnam Journal of Mathematics, Computer Science Logic 2005, 2006, European Analytical Philosophy Congress 2014

- Member in the Organizing Committee of:
  - The international workshop on Graphs, Networks and Digital Humanities, October 9-11, University of Bucharest, Romania
  - Fuzzy Logic meets Quantum Logic: The first joint Bucharest - Cagliari Logical Meeting (BuCaL2017), September 25-26, University of Bucharest, Romania
  - Special Session: Logic in Computer Science, The Eighth Congress of Romanian Mathematicians, June 26 - July 1, Iași, Romania
  - Algebra and Probability in Many-Valued Logics, International Workshop on Logical and Algebraic aspects of Many-Valued Reasoning, May 14-16, 2009, Technische Universität Darmstadt, Germany
- Co-organizer of the University of Bucharest/IMAR Logic Seminar (2012 - present)
- Co-organizer of the IMAR Seminar "Effective methods in metric analysis" (2011-2013)

## **SUPERVISION OF GRADUATE STUDENTS**

### **PhD students**

- Andrei Sipoș (University of Bucharest, 2015 - present)

### **PhD referee**

- Alexandru Dragomir (University of Bucharest, 2015)

- Muhammad Aqeel Ahmad Khan (The Islamia University of Bahawalpur, 2014)
- David Ariza-Ruiz (Universidad de Sevilla, 2013)

## TALKS

### Invited Talks at Conferences and Workshops

- Oberwolfach Workshop 1147: Mathematical Logic: Proof Theory, Type Theory and Constructive Mathematics, Mathematisches Forschungsinstitut Oberwolfach, Germany, November 16 - 22, 2014.
- Topics in Geometric Group Theory, IMAR, Romania, 29.09 - 05.10 2014
- IRTG Research Seminar "Proof Mining and Nonlinear Analysis", Technische Universität Darmstadt, Germany, 26.02 - 28.02.2014.
- Anniversary Conference "Faculty of Sciences - 150 years", University of Bucharest, Romania, 29.08 - 01.09.2013.
- Workshop on Operator Theory in Metric Spaces, Department of Mathematical Analysis, Universidad de Sevilla, 03 - 04.04.2013.
- 21st International Symposium on Mathematical Programming (ISMP 2012), Berlin, Germany, August 19-24, 2012,  
Invited Session: Variational inequalities and optimization problems on Riemannian manifolds.
- Oberwolfach Workshop 1145: Mathematical Logic: Proof Theory, Type Theory and Constructive Mathematics, Mathematisches Forschungsinstitut Oberwolfach, Germany, November 6-12, 2011.
- Conference on Nonlinear Analysis and Optimization (in celebration of Alex Ioffe's 70th and Simeon Reich's 60th birthdays), Technion, Haifa, Israel, June 18-24, 2008.
- Oberwolfach Workshop 0815: Mathematical Logic: Proof Theory, Constructive Mathematics, Mathematisches Forschungsinstitut Oberwolfach, Germany, April 6-12, 2008.

- Conference “Methods of Proof Theory in Mathematics”, Max-Planck Institute for Mathematics, Bonn, Germany, June 4-9, 2007.
- AMS-MAA Joint Mathematics Meetings, AMS-ASL Special Session on Logical Methods in Computational Mathematics, New Orleans, USA, January 5-8, 2007.
- Horizons of Truth: Logics, Foundations of Mathematics, and the Quest for Understanding the Nature of Knowledge. Gödel Centenary 2006. An International Symposium Celebrating the 100th Birthday of Kurt Gödel, Vienna, Austria, April 27, 2006.
- MAP (Mathematics, Algorithms, Proofs), 2006, Castro Urdiales, Spain, January 9-13, 2006.
- Oberwolfach Workshop 0512: Mathematical Logic: Proof Theory, Type Theory and Constructive Mathematics, Mathematisches Forschungsinstitut Oberwolfach, Germany, March 20-26, 2005.
- Dagstuhl Seminar 05021: MAP (Mathematics, Algorithms, Proofs), Internationales Begegnungs- und Forschungszentrum (IBFI), Schloss Dagstuhl, Germany, January 09-14, 2005.
- Workshop on Proof Theory and Algorithms, ICMS (International Center for Mathematical Sciences), Edinburgh, United Kingdom, March 22-29, 2003.

### **Invited Seminar and Colloquium Talks**

- Mathematical Logic Seminar, University of Lisbon, October 20, 2017.
- Middlesex University London, UK, September 19, 2016.
- Logic Seminar, Technische Universität Darmstadt, Germany, November 9, 2012.
- Logic Seminar, Department of Mathematics, University of Illinois at Urbana-Champaign, USA, May 1, 2012.
- Department of Mathematical Analysis, University of Seville, Spain, June 13, 2010.

- Department of Mathematical Analysis, University of Seville, Spain, June 14, 2010.
- Oberseminar mathematische Logik, Universität Bonn, Germany, October 19, 2009.
- Seminaire de l'Equipe de Mathématiques Appliquées, Université Paul Verlaine-Metz, France, February 14, 2008.
- Max-Planck Institute for Mathematics, Bonn, Germany, March 21, 2007.
- Max-Planck Institute for Mathematics, Bonn, Germany, March 8, 2007.
- NASA Ames/RIACS 2003 SSRP (Summer Student Research Program) Seminar, NASA Ames Research Center and Research Institute for Advanced Computer Science (RIACS), Moffet Field, California, USA, September 2, 2003.
- Mathematical Logic Seminar, Stanford University, CA, USA, August 6, 2002.
- NASA Ames/RIACS 2002 SSRP (Summer Student Research Program) Seminar, NASA Ames Research Center and Research Institute for Advanced Computer Science (RIACS), Moffet Field, California, USA, August 1, 2002.
- Logic and Semantics Seminar, BRICS (Basic Research in Computer Science), University of Aarhus, Denmark, May 15, 2002.

### **Talks at Conferences and Workshops**

- Logic Colloquium 2014, Vienna, Austria, July 14-19, 2014.
- Logic Colloquium 2012, Manchester, Great Britain, July 12-18, 2012.
- ICFPTA 2009 (The 9<sup>th</sup> International Conference on Fixed Point Theory and its Applications), Changhua, Taiwan, July 16 - 22, 2009.
- Colloquium Logicum 2008, Darmstadt, Germany, September 10-13, 2008.

- WCNA (World Congress of Nonlinear Analysis) 2008, Orlando, USA, July 2-11, 2008.
- Domains VIII and Computability Over Continuous Data Types, Novosibirsk, Russia, September 11 - 15, 2007.
- ICFPTA 2007 (The 8th International Conference on Fixed Point Theory and Applications), Chiang Mai, Thailand, July 17-22, 2007.
- 13th Workshop on Logic, Language, Information and Computation (WoLLIC'2006), Stanford, CA, USA, July 18-21, 2006.

## Seminar Talks

- Logic in Computer Science Seminar, University of Bucharest, Romania, May 16 and May 22, 2014.
- Logic Seminar, IMAR, Romania, January - February 2013.
- Seminar "Effective methods in metric analysis", IMAR, Romania, February - April 2012.
- Seminar "Effective methods in metric analysis", IMAR, Romania, January 2012.
- Department of Mathematics, Technische Universität Darmstadt, Germany, November 28, 2008.
- Logic Seminar, Department of Mathematics, Technische Universität Darmstadt, Germany, June 27, 2008.
- Logic Seminar, Department of Mathematics, Technische Universität Darmstadt, Germany, May 25, 2007.
- University of Bucharest, Romania, September 21, 2006.
- AG1 Seminar, Department of Mathematics, Technische Universität Darmstadt, Germany, June 11, 2004.
- Weekly Seminar "Alexandru Brezuleanu", University of Bucharest, Romania, January 16 and 23, 2003.

- ASE, Bucharest, Romania, September 17, 2002.
- Communication Session “Alexandru Brezuleanu”, University of Bucharest, Romania, May 5, 2001.
- Anniversary Symposium “Sergiu Ru-deanu”, University of Bucharest, Romania, February 9, 2000.
- Communication Session “Grigore C. Moisil”, University of Bucharest, Romania, June 19, 1998.

## TEACHING RECORD

### Courses Taught

- *Advanced Logic for Computer Science*, Master I, Department of Computer Science, Faculty of Mathematics and Computer Science, University of Bucharest, Winter Term 2017/2018.
- *Mathematical and Computational Logic*, Department of Computer Science, Faculty of Mathematics and Computer Science, University of Bucharest, Winter Term 2015/2016, 2016/2017, 2017/2018
- *Techniques of Combinatorial Optimization*, Master I, Department of Computer Science, Faculty of Mathematics and Computer Science, University of Bucharest, Winter Term 2014/2015, 2015/2016, 2016/2017.
- *Model Theory*, Master I, Department of Computer Science, Faculty of Mathematics and Computer Science, University of Bucharest, Summer Term 2015, 2016, 2017.
- *Ergodic theory and additive combinatorics*, Department of Mathematics, SNSB (Școala Normală Superioară București), Summer Term 2013.
- *Ergodic Ramsey Theory*, Department of Mathematics, SNSB (Școala Normală Superioară București), Winter Term 2010/2011.
- *Analysis II* for MCS (Mathematics with Computer Science), Department of Mathematics, Technische Universität Darmstadt, Germany, Summer Terms 2006 and 2007.

- *Analysis I* for MCS (Mathematics with Computer Science), Department of Mathematics, Technische Universität Darmstadt, Germany, Winter Term 2006/2007.

## **Scientific Seminars**

- *Effective methods in (nonlinear) ergodic theory*, Department of Mathematics, SNSB (Școala Normală Superioară București), Summer Term 2011.

# PUBLICATIONS

## 1 Books

1. *Representations of many-valued algebras*, Editura Universitară, Bucharest, 2010, 130pp.

## 2 Book Chapters

1. *An application of proof mining to the proximal point algorithm in  $CAT(0)$  spaces* (with A. Sipoş)  
arXiv:1707.09169 [math.OC], 2017; to appear in A. Bellow, C. Calude, T. Zamfirescu (Editors): *Mathematics Almost Everywhere. In Memory of Solomon Marcus*, World Scientific.
2. *Nonexpansive iterations in uniformly convex  $W$ -hyperbolic spaces*, in A. Leizarowitz, B. S. Mordukhovich, I. Shafrir, A. Zaslavski (Editors): *Nonlinear Analysis and Optimization I: Nonlinear Analysis, Contemporary Mathematics*, Vol. 513 (2010), AMS, 193-209.

## 3 Journal Papers

1. *Effective strong convergence of the proximal point algorithm in  $CAT(0)$  spaces* (with A. Sipoş)  
arXiv:1801.02179 [math.OC], 2018; accepted for publication in *Journal of Nonlinear and Variational Analysis*.
2. *Quantitative results on Fejér monotone sequences* (with U. Kohlenbach and A. Nicolae)  
*Communications in Contemporary Mathematics*, Vol. 20 (2018), 1750015 [42 pages].
3. *A note on an alternative iterative method for nonexpansive mappings* (with A. Nicolae)  
*Journal of Convex Analysis*, Vol. 24 (2017), No. 2, 501-503.
4. *Quantitative results on the Ishikawa iteration of Lipschitz pseudo-contractions* (with V. Radu and A. Sipoş)

- Journal of Nonlinear and Convex Analysis, Vol. 17 (2016), No. 11, 2277-2292.
5. *Effective results on nonlinear ergodic averages in  $CAT(k)$  spaces* (with A. Nicolae),  
Ergodic Theory and Dynamical Systems, Vol. 36 (2016), No. 8, 2580-2601.
  6. *A note on an ergodic theorem in weakly uniformly convex geodesic spaces* (with A. Nicolae),  
Archiv der Mathematik, Vol. 105 (2015), No. 5, 467-477.
  7. *A rate of asymptotic regularity for the Mann iteration of  $\kappa$ -strict pseudo-contractions* (with D. Ivan),  
Numerical Functional Analysis and Optimization, Vol. 36 (2015), No. 6, 792-798.
  8. *Firmly nonexpansive mappings in classes of geodesic spaces* (with D. Ariza-Ruiz and G. López-Acedo),  
Transactions of the American Mathematical Society, Vol. 366 (2014), 4299-4322.
  9. *An application of proof mining to nonlinear iterations*,  
Annals of Pure and Applied Logic, Vol. 165 (2014), No.9, 1484-1500.
  10. *Effective results on compositions of nonexpansive mappings* (with A. Nicolae),  
Journal of Mathematical Analysis and Applications, Vol. 410 (2014), No. 2, 902-907.
  11. *Effective metastability of Halpern iterates in  $CAT(0)$  spaces* (with U. Kohlenbach),  
Advances in Mathematics, Vol. 231 (2012), No. 5, 2526-2556.  
Addendum in Advances in Mathematics, Vol. 250 (2014), 650-651.
  12. *On the computational content of convergence proofs via Banach limits* (with U. Kohlenbach),  
Philosophical Transactions of the Royal Society A, Vol. 370 (2012), No. 1971, 3449–3463,  
Theme Issue *The foundations of computation, physics and mentality: the Turing legacy*.

13. *Alternative iterative methods for nonexpansive mappings, rates of convergence and application* (with V. Colao, G. López-Acedo and V. Martin-Marquez),  
Journal of Convex Analysis, Vol. 18 (2011), No. 2, 465–487.
14. *Asymptotically nonexpansive mappings in uniformly convex hyperbolic spaces* (with U. Kohlenbach),  
Journal of the European Mathematical Society, Vol. 12 (2010), No. 1, 71-92.
15. *Maximal residuated lattices with lifting Boolean center* (with G. Georgescu and C. Mureşan),  
Algebra Universalis, Vol. 63 (2010), No. 1, 83-99.
16. *A quantitative Mean Ergodic Theorem for uniformly convex Banach spaces* (with U. Kohlenbach),  
Ergodic Theory and Dynamical Systems, Vol. 29 (2009), No. 6, 1907-1915.
17. *Rates of asymptotic regularity for Halpern iterations of nonexpansive mappings*,  
Journal of Universal Computer Science, Vol. 13 (2007), No. 11, 1680-1691;  
in C.S. Calude, G. Stefănescu, and M. Zimand (Editors): Combinatorics and Related Areas. A Collection of Papers in Honor of the 65th Birthday of Ioan Tomescu.
18. *The approximate fixed point property in product spaces* (with U. Kohlenbach),  
Nonlinear Analysis Series A: Theory, Methods & Applications, Vol. 66 (2007), No. 4, 806-818.
19. *A quadratic rate of asymptotic regularity in  $CAT(0)$ -spaces*,  
Journal of Mathematical Analysis and Applications, Vol. 325 (2007), No. 1, 386-399.
20. *Baer extensions of BL-algebras*,  
Journal of Multiple-Valued Logic and Soft Computing, Vol. 12 (2006), No. 3-4, 321-336.

21. *Sheaf representations of BL-algebras*,  
Soft Computing - A Fusion of Foundations, Methodologies and Applications, Vol. 9, No. 12 (2005), Special issue on BL-algebras, 897-909.
22. *Pseudo-hoops* (with G. Georgescu and V. Preoteasa),  
Journal of Multiple-Valued Logic and Soft Computing, Vol. 11 (2005), No. 1-2, 153-184.
23. *Compact representations of BL-algebras* (with A. Di Nola),  
Archive for Mathematical Logic, Vol. 42 (2003), No. 8, 737 - 761.
24. *Mann iterates of directionally nonexpansive mappings in hyperbolic spaces* (with U. Kohlenbach),  
Abstract and Applied Analysis, Vol. 2003 (2003), 449-477.
25. *The prime and maximal spectra and the reticulation of BL-algebras*,  
Central European Journal of Mathematics, Vol. 1 (2003), No. 3, 382-397.
26. *Canonical models and filtrations in three-valued propositional modal logic*,  
Journal of Multiple-Valued Logic, Vol. 8 (2002), No. 1-2, 577-590.
27. *Some classes of pseudo-BL algebras* (with G. Georgescu),  
Journal of Australian Mathematical Society, Vol. 73 (2002), No. 1, 127-153.
28. *Boolean products of BL-algebras* (with A. Di Nola and G. Georgescu),  
Journal of Mathematical Analysis and Applications, Vol. 251 (2000), No. 1, 106-131.

## 4 Conference, Workshop Papers

1. *Proof mining in  $\mathbb{R}$ -trees and hyperbolic spaces*,  
Electronic Notes in Theoretical Computer Science, Vol. 165 (2006), Elsevier, 95-106;  
in G. Mints and R. de Queiroz (Editors): Proceedings of the 13th Workshop on Logic, Language, Information and Computation (WOLLIC 2006), Stanford University, CA, USA, 18-21 July 2006.

2. *Certifying optimality of state estimation programs* (with G. Roşu, R. Prasad Venkatesan and J. Whittle),  
Lecture Notes in Computer Science, Vol. 2725 (2003), Springer, 301-314;  
in W. A. Hunt Jr., F. Somenzi (Editors): Computer Aided Verification (CAV), Proceedings of the 15th International Conference, Boulder, CO, USA, 8-12 July 2003, Proceedings.

## 5 Technical Reports

1. *Proof mining in fixed point theory and ergodic theory*,  
Oberwolfach Preprints OWP 2009-05, Mathematisches Forschungsinstitut Oberwolfach, Germany, 2009, 71pp.
2. *Certifying Kalman Filters* (with G. Roşu),  
RIACS Technical Report TR.03.02, Research Institute for Advanced Computer Science (RIACS), NASA Ames Research Center, Moffet Field, CA, USA, January 2003, 53pp.

## 6 Published abstracts

1. *Proof theoretic methods in nonlinear analysis III. Quantitative results on Féjer monotone sequences* (with U. Kohlenbach and A. Nicolae),  
in S. Buss, U. Kohlenbach, M. Rathjen (Editors): Workshop Mathematical Logic: Proof Theory, Constructive Mathematics, November 16-22, 2014, Mathematisches Forschungsinstitut Oberwolfach;  
Oberwolfach Report 52 (2014), 28-29.
2. *Recent developments in proof mining* (with U. Kohlenbach),  
in S. Buss, U. Kohlenbach, M. Rathjen (Editors): Workshop Mathematical Logic: Proof Theory, Constructive Mathematics, November 6-12, 2011, Mathematisches Forschungsinstitut Oberwolfach;  
Oberwolfach Report 52 (2011), 20-22.
3. *Recent results in proof mining* (with U. Kohlenbach),  
in S. Buss, U. Kohlenbach, H. Schwichtenberg (Editors): Workshop Mathematical Logic: Proof Theory, Constructive Mathematics, April

6-12, 2008, Mathematisches Forschungsinstitut Oberwolfach;  
Oberwolfach Reports, Vol. 5, No. 2, European Mathematical Society  
Publishing House, 2008, 930-931.

4. *Proof mining in  $CAT(0)$ -spaces and  $\mathbb{R}$ -trees*,  
in R. Daverman, S. Friedlander, M. Lapidus, M. Miller, L. Sibner (Ed-  
itors): Abstracts of Papers presented to the American Mathematical  
Society, Volume 28, No. 1, Issue 147, AMS, 2007, 16.
5. *Approximate fixed points of nonexpansive functions in product spaces*  
(with U. Kohlenbach),  
in T. Cocquand, H. Lombardi, M.-F. Roy (Editors): Mathematics, Al-  
gorithms, Proofs, January 9-14, 2005, Dagstuhl Seminar Proceedings  
05021, Internationales Begegnungs- und Forschungszentrum (IBFI),  
Schloss Dagstuhl, Germany, 2006.
6. *Approximate fixed point property in product spaces* (with U. Kohlen-  
bach),  
in S. Buss, Y. Moschovakis, H. Schwichtenberg (Editors): Workshop  
Mathematical Logic: Proof Theory, Type Theory and Constructive  
Mathematics, March 20-26, 2005, Mathematisches Forschungsinstitut  
Oberwolfach;  
Oberwolfach Reports, Vol. 2, No. 1, European Mathematical Society  
Publishing House, 2005, 795-797.

## 7 Preprints

1. An abstract proximal point algorithm (with A. Nicolae and A. Sipoş)  
arXiv:1711.09455 [math.OC], 2017.
2. Barycenters in uniformly convex geodesic spaces (with A. Nicolae and  
A. Zaharescu)  
arXiv:1609.02589 [math.MG], 2016.