#### CURRICULUM VITAE

# HANIA USCKA-WEHLOU

### I. PERSONAL DATA:

- Born in Wąbrzeźno (Poland), February 10, 1973.
- Citizenships: Polish and Swedish.
- Married, 2 children (a daughter born 2002 and a son born 2005).
- Lives in Uppsala (Flintstensvägen 10, SE-752 67 Uppsala).
- Countries of residence:
  - (1) Poland (February 1973 December 1995)
  - (2) Belgium (January 1996 October 2001)
  - (3) Sweden (October 2001 onwards).
- Phone 073-960.01.23. E-mail: hania@wehlou.com, hania.uscka.wehlou@mdh.se.
- Home page: http://wehlou.com/hania/cv.htm, http://katalog.uu.se/profile/?id=N3-1379, www.mitm.se.
- Current employment: at Mälardalen University (as a Senior Lecturer *Lektor* in mathematics) and at MITM AB (working on a project on mathematical terminology in several languages).

# II. EDUCATION:

- January 2012 finished Business Lab (a three months long course) at Uppsala Innovation Center.
- 25 September 2009 PhD in mathematics from Uppsala University (PhD student 2003–2009, of which 19 months on maternity leave). Thesis: *Digital Lines, Sturmian Words, and Continued Fractions*. Advisor: Professor Christer Kiselman.
- September 1997 M.Sc. in theoretical mathematics (with pedagogical qualifications) from Copernicus University in Toruń (Poland). Graduated with top honors. Thesis: Continuation method for contractions and applications in differential calculus. Advisor: Professor Andrzej Granas.
- June 1992 graduated from Liceum IV in Toruń, Poland. I was educated in a class with a strong mathematical program, with math teachers from the Department of Mathematics at the Copernicus University. I participated four times in the Mathematical Olympiad and twice reached the national final in Warsaw. I also won a stipend of the National Foundation for Exceptionally Gifted Children during this period. Graduated from high school as *Primus inter pares*.

Date: May 15, 2020.

# III. HIGHER EDUCATION COURSES AT MDH:

• Spring 2020: **PEA924**: *Högskolan och utbildningsuppdraget* (Higher Education in its Context), teacher: Henrik Brandén. 2,5 credits.

### IV. SCHOLARSHIPS AND AWARDS:

- **Pedagogical award** from *UTN* (Uppsala Union of Engineering and Science Students) for my teaching at Uppsala University (UU) in 2018. This best-teacher prize is awarded each year for one chosen teacher from the whole Faculty of Science and Engineering at UU (January 2019).
- **Pedagogical award** from *K-sektionen*, for the best teacher for the master program *Kemiteknik* (Chemical Engineering) at UU (December 2018).
- Det elektrotekniska pedagogiska priset 2018: the **pedagogical award** from the master program *Elektroteknik* (Electrical Engineering) at UU (May 2018).
- F-lärarutmärkelsen<sup>1</sup>: the **pedagogical award** from the master program Teknisk fysik (Engineering Physics) at UU (May 2018).
- (for my company MITM AB) Funding for feasibility study for *iotaMed*, ALMI Företagspartner (2013).
- (for my company MITM AB) Funding for commercial verification of our medical record *iotaMed*, Innovationsbron (2013).
- Benzeliusbelöning i fysisk-matematiska klassen from Kungliga Vetenskaps-Societeten in Uppsala for the research in digital geometry and combinatorics on words (2010).
- Magnuson Scholarship, The Royal Swedish Academy of Sciences (Kungliga Vetenskapsakademien) (2010).
- The Lennander Scholarship, UU (2010).

### V. LANGUAGES:

- Polish (native speaker).
- Swedish (near to native speaker; TISUS certificate, Swedish on academic level).
- English (fluent).
- Dutch (fluent).
- Russian (reading, understanding, some speaking).

# VI. PROFESSIONAL CERTIFICATES:

- September 1997: Polish teaching license kwalifikacje pedagogiczne (Mathematics for secondary school and high school).
- June 2000: Belgian teaching license geaggregeerde voor het secundair onderwijs groep 2 (Mathematics for secondary school and high school).

<sup>&</sup>lt;sup>1</sup>Det är ett pris som går till en lärare, föreläsare eller labbhandledare vid tekniska fysiker programmet i Uppsala, som utmärkt sig pedagogiskt och varit framstående i sin undervisning.

• August 2017: Swedish teaching license Lärarlegitimationen: Ämneslärare i matematik med behörighet för grundskolan åk 3–9, gymnasiet, gymnasiets introduktionsprogram, vuxenutbildning grundläggande nivå och gymnasienivå, Sameskolan.

# VII. PROFESSIONAL EXPERIENCE:

- 2019-08-14 (permanent position): employed at Mälardalen University as a full-time *Lektor* (Senior Lecturer) in mathematics. Teaching: Calculus 1+2 (distance), Calculus 3 and Precalculus, Linear Algebra and Geometry, Discrete Mathematics.
- 2017-08-15 2019-08-13: employed at Uppsala University as a full-time *Lektor* (Senior Lecturer) in mathematics. 70 % of the full-time: teaching eight courses (both lectures and classes): Geometry and Calculus (twice), Linear Algebra and Geometry 1, Calculus 3 (three times), Derivatives and Integrals, mathematical project with LATEX; 30 % of full-time: research project on mathematical terminology.
- 2017-01-09 2017-06-09: employed at  $Peabskolan\ AB$  in Solna (Stockholm) as a part-time (50%) maths teacher: teaching mathematics Mat1a and Mat2a.
- 2016-08-10 2016-10-31: employed at *Lundellska gymnasiet* in Uppsala as a full-time substitute teacher. Courses: mathematics Mat1b, Mat2b, and Mat9 at SPRINT (language introduction program for students learning Swedish as a foreign language).
- 2016-04-04 2016-06-10: employed at *Sjögrenska gymnasiet* in Knivsta as a parttime (70%) substitute teacher: teaching mathematics (56%: Mat1a and Mat9) and English (14%: Engelska5).
- 2013-09-12 onwards: employed at my own company MITM AB, working on literary translations from Swedish to Polish (see list VII below) and (since September 2015) preparing a translation and research project on mathematical terminology in different European languages: *Multilingual Mathematics*, in cooperation with the Scandinavian Research Centre (Department of Applied Linguistics) in Warsaw, Institute of Slavic Languages at Stockholm University, and the Department of Mathematics and Science Education at Stockholm University. The book to be translated is *Matematiktermer för skolan* by Christer Kiselman and Lars Mouwitz.
- 2010-08-01 2016-08-09: employed at MITM AB, working as marketing manager for a new medical record *iotaMed*.
- 2009-11-01 2010-07-31: worked on the project Mathematical methods in modeling and analysis of concurrent systems in cooperation with the Group of Formal Languages and Concurrency from the Faculty of Mathematics and Computer Science of the Copernicus University in Toruń. During the period 2010-02-01 2010-07-31 this project was officially run by the Department of Computer Science at Uppsala University. My scientific advisor was Professor Parosh Aziz Abdulla. I got two scholarships for this project: one of them (the Lennander Scholarship) form Uppsala University, the second one (Magnuson scholarship) from The Royal Swedish Academy of Sciences.

- 2003-07-01 2009-09-30 (maternity leave 2005-06-07 2007-01-01): Uppsala University. PhD position in The Graduate School in Mathematics and Computing (FMB), teaching (one-dimensional calculus).
- 2002-02-02 2003-06-30: maternity leave.
- 2001-10 2002-01: student at Uppsala University.
- 2001-04 2001-09: Software dev. at Cactus Computing BVBA (Ghent, Belgium).
- 2000-10-15 2001-03-31: VUB (Flemish University of Brussels). I worked in the project EXPLOOT led by Professor Ivan Cnop (planning, designing, and writing lesson packages in *Mathematica* for students); some teaching. I was proposed to prolong the contract with VUB but I did not accept it because I knew I would move to Sweden.
- 2000-05 2000-10: Software developer at Quadrat NV (Ghent, Belgium).
- 1997-09 2000-05: Sales Assistant Eastern Europe at LANO Carpets (Harelbeke, Belgium). This was my first language-related job; I was using Dutch, Polish, English and Russian on a daily basis.

# VIII. LITERARY TRANSLATIONS FROM SWEDISH TO POLISH:

- En riktig människa by Gunilla Gerland (published in Poland in October 2015 by Wolters Kluwer Polska)
- Millans äventyr, Mycket mera Millan, Modiga Millan, Millan hästar, hundar och hår under armarna by Milena Bergquist (ready; not yet published)
- Matematiktermer för skolan by Christer Kiselman and Lars Mouwitz (planned).

### IX. MY RESEARCH INTERESTS:

- Combinatorics on words.
- Combinatorial aspects of theoretical computer science (Petri nets, theory of traces).
- Current main research interests: mathematics and languages linguistic and didactical approach.

# X. MY RESEARCH UNTIL SEPTEMBER 2009:

My research until September 2009 was focused on arithmetical properties of digital straight lines with irrational slopes, and, consequently, on Sturmian words. I defended my PhD Thesis Digital Lines, Sturmian Words, and Continued Fractions on September 25 (2009).

# XI. MY MOST IMPORTANT PUBLICATIONS:

- 07-1 Uscka-Wehlou, Hanna, 2007. Digital lines with irrational slopes. *Theoretical Computer Science* **377**, 157–169.
- 08-1 Uscka-Wehlou, Hanna, 2008. Continued Fractions and Digital Lines with Irrational Slopes. In D. Coeurjolly et al. (Eds.): DGCI 2008, LNCS 4992, pp. 93-104.

- 08-2 Uscka-Wehlou, Hanna, 2008. A run-hierarchical description of upper mechanical words with irrational slopes using continued fractions; 15 pp. In *Proceedings of 12th Mons Theoretical Computer Science Days (Mons, Belgium), 27–30 August 2008.* http://www.jmit.ulg.ac.be/jm2008/index-en.html. Preprint: http://wehlou.com/hania/files/uu/mons08rev.pdf.
- 09-1 Uscka-Wehlou, Hanna, 2009. Run-hierarchical structure of digital lines with irrational slopes in terms of continued fractions and the Gauss map. *Pattern Recognition* 42, 2247–2254.
- 09-2 Uscka-Wehlou, Hanna, 2009. Two equivalence relations on digital lines with irrational slopes. A continued fraction approach to upper mechanical words. *Theoretical Computer Science* **410** (38–40), 3655–3669.
- 09-3 Uscka-Wehlou, Hanna, 2009. Sturmian words with balanced construction; 12 pp. In *Proceedings of Words 2009*, the 7th International Conference on Words (Salerno, Italy), 14–18 Sept. 2009. http://words2009.dia.unisa.it/accepted.html. Preprint: http://wehlou.com/hania/files/uu/words2009.pdf.
- 09-4 Uscka-Wehlou, Hanna, 2009. Digital Lines, Sturmian Words, and Continued Fractions. PhD Thesis, 152 pp. In Uppsala Dissertations in Mathematics 65. ISBN: 978-91-506-2090-0.
- 10-1 Uscka-Wehlou, Hanna, 2010. Continued fractions, Fibonacci numbers, and some classes of irrational numbers. Published in *Acta Mathematica Academiae Paedagogicae Nyíregyháziensis* **26(1)**.

#### XII. CONFERENCE TALKS AND OTHER SCIENTIFIC PRESENTATIONS:

- 2003-12-15: Presentation *Digital lines* at the Seminar of the Centre for Image Analysis, Uppsala.
- 2004-11-15–16: Presentation *Digital lines* during the FMB-FMD Open House Conference, Uppsala University.
- 2005-01-24: Presentation *Theory of digital lines* at the Seminar of the Centre for Image Analysis, Uppsala.
- 2008-04-16–18: The 14th International Conference on Discrete Geometry for Computer Imagery, DGCI 2008 (Lyon, France). Poster and a short oral presentation Continued Fractions and Digital Lines with Irrational Slopes.
- 2008-08-27-30: The 12th Mons Theoretical Computer Science Days, JM 2008 (Mons, Belgium). Conference talk A run-hierarchical description of upper mechanical words with irrational slopes using continued fractions.
- 2008-11-07-08: Sonja Kovalevskydagarna (for *gymnasium*-pupils from all over Sweden) at Uppsala University: I was a workshop leader for the workshop called *Groups* and I was a member of the problem-solving group.
- 2009-09-14-18: The 7th International Conference on Words, Words 2009 (Salerno, Italy). Conference talk Sturmian words with balanced construction.

- 2009-09-25: Presentation of my PhD thesis Digital Lines, Sturmian Words, and Continued Fractions at Uppsala University. The faculty Opponent: Dr. Damien Jamet (Nancy); the members of the Grading Committee: Dr. Petter Brändén (Stockholm University and the Royal Institute of Technology), Docent Rikard Bögvad (Stockholm University), Professor Isabelle Debled-Rennesson (Laboratoire Lorrain de Recherche en Informatique et ses Applications, Nancy), Professor Anders Heyden (Lund University), and Docent Warwick Tucker (Uppsala University).
- 2009-10-27: Presentation Classes of irrational numbers defined by their continued fraction expansions at the Seminar Automorfizmy i derywacje in the Faculty of Mathematics and Computer Science of the Copernicus University in Toruń, PL.
- 2009-12-02: Presentation Some combinatorial problems related to digital straight lines with irrational slopes and to balanced aperiodic words at the Combinatorics Seminar at KTH, the Royal Institute of Technology, Stockholm, Sweden.
- 2010-02-22-25: Scientific visit at the Faculty of Mathematics and Computer Science of the Copernicus University in Toruń, Poland. Discussions about the project Mathematical methods in modeling and analysis of concurrent systems during a workshop on Petri nets and traces, organized by the group Formal Languages and Concurrency.
- 2010-07-19–23: Participation in the Workshop MASYW 2010 (Mathematical methods in modeling and analysis of concurrent systems) in Tleń (Poland) organized by the research group *Formal Languages and Concurrency* from the Faculty of Mathematics and Computer Science of the Copernicus University in Toruń, Poland.

# XIII. TEACHING EXPERIENCE (IN SWEDISH, AT UPPSALA UNIVERSITY):

- Fall semester 2003 (20% of my full-time job at UU): One-Dimensional Calculus (*Endimensionell analys*), classes for students of some engineering programs. Lecturer: Leif Abrahamsson.
- Spring Semester 2004 (20% of my full-time job at UU): One-Dimensional Calculus (*Endimensionell analys*), classes for students of some engineering programs. Lecturer: Leif Abrahamsson.
- Fall Semester 2004 (20 % of my full-time job at UU): Calculus I (*Analys MN1*), classes for students of the natural sciences program. Lecturer: Thomas Erlandsson.
- Spring Semester 2007 (10 % of my full-time job at UU): Calculus I (*Analys MN1*), classes for students of the natural sciences program. Lecturer: Warwick Tucker.
- Spring Semester 2008 (10% of my full-time job at UU): Single Variable Calculus (*Envariabelanalys*), classes for students of the geology program and of the teaching program. Lecturer: Jörgen Östensson.
- Spring Semester 2009 (10 % of my full-time job at UU): Single Variable Calculus (*Envariabelanalys*), classes for the IT program. Lecturer: Leif Abrahamsson.

- Fall Semester 2017 (my first semester as a full-time Senior Lecturer in Mathematics at UU): Head teacher (huvudlärare) for Geometry and Single Variable Calculus 1MA187; lectures and classes for students of the Bachelor Program in Physics and the Physics Teachers Program (57 students).
- Fall Semester 2017: Course director (*kursansvarig*) for *Linear Algebra and Geometry 1* **1MA025**; lectures and classes for various engineering progr. (219 students).
- Spring Semester 2018: Course director (kursansvarig) for Calculus 3, 1MA016/1MA183 (Flervariabelanalys), lectures and classes for various engineering programs and of the Bachelor Program in Mathematics (353 students).
- Spring Semester 2018: Course director (kursansvarig) for A Mathematical Project with LATEX, 1MA193, for the Bachelor Program in Mathematics (11 students).
- Fall Semester 2018: Head teacher (huvudlärare) for Geometry and Single Variable Calculus 1MA187; lectures and classes for students of the Bachelor Program in Physics and the Physics Teachers Program (48 students).
- Fall Semester 2018: Course director (*kursansvarig*) for Calculus 3, **1MA016** (Flervariabelanalys), lectures and classes for various engineering programs, teaching training program and the Bachelor Program in Chemistry (165 students).
- Spring Semester 2019: Course director (kursansvarig) for Calculus 3, Limited course, 1MA017 (Flervariabelanalys), lectures for the Bachelor Program in IT and for the Master Program in Materials Engineering (53 students).
- Spring Semester 2019: Course director (kursansvarig) for Derivatives and Integrals, 1MA014 (Derivator och integraler), lectures and classes for Bachelor Program in Earth Science (11 students).

# XIV. TEACHING EXPERIENCE (IN SWEDISH, AT MÄLARDALEN UNIVERSITY):

- Fall Semester 2019 (my first semester as a full-time Senior Lecturer in Mathematics at MDH): Course director for Calculus 3 MAA142 Kalkyl fortsättningskurs for the College Engineering Program in Energy Technology (Högskoleingenjörsprogrammet i energiteknik); lectures and classes (26 students).
- Fall Semester 2019: Course director for Calculus 1 and 2 MAA141 Kalkyl grund-kurs, a distance course for various engineering programs (26 students).
- Fall Semester 2019: Lecturer and teacher for *Pre-calculus* **MAA121** *Grundkurs i matematik*, lectures and classes for various engineering programs (50 students).
- Spring Semester 2020: Lecturer and teacher for *Linear Algebra and Geometry* **MAA150** *Vektoralgebra* for the Master of Science Programme in Energy Engineering (*Civilingenjörsprogrammet i energiteknik*); lectures and classes (22 students).
- Spring Semester 2020: Teacher for *Discrete Mathematics* **MMA122** *Diskret matematik*, classes for 1 group of students of The college engineering program in network engineering (*Högskoleingenjörsprogrammet i nätverksteknik*) (26 students).

• Spring Semester 2020: Lecturer and teacher for *Calculus 3* **MAA152** *Flervariabelkalkyl*, lectures and classes for various engineering programs (50 students).

# XV. TEACHING EXPERIENCE (IN VARIOUS HIGH SCHOOLS IN SE) FROM 2016:

Mat9, Mat1a, Mat2a, Mat1b, Mat2b. I am qualified to teach any maths courses in high schools. Teaching experience at Uppsala University was very near to combination of Mat3c, Mat4 and Mat5, both the courses' content and the age of the students.

### XVI. TEACHING MATERIAL PRODUCED BY ME:

- Fall 2000, Complexe getallen ('Complex numbers', in Dutch), an interactive Mathematica notebook designed, programmed and written by me during my work for the Exploot project (led by Professor Ivan Cnop) at the Flemish University of Brussels, Belgium. The notebook has been used as teaching material for Dutch speaking students. It can be found on the home page of Exploot (you have to click on "Fourier en complexe analyse" left on the page, then click on "complexe getallen" left on the next page).
- Spring 2001, Complexe veeltermen ('Complex polynomials', in Dutch), as above.
- Spring 2001, Complexe getallen en de meetkunde ('Complex numbers and geometry', in Dutch), as above.
- November 2008, Minnesanteckningar för deltagarna i workshop GRUPPER ('Notes for the participants of the workshop GROUPS', in Swedish), notes I wrote for the Sonja Kovalevskydagarna at Uppsala University.
- September 2016, Repetitionshäfte Matte2b, kapitel 1 Origo2 (10 pages), notes I wrote for my students at Lundellska Gymnasiet: theory and exercises.
- January 2017, Repetitionshäfte Matte1a (31 pages), based on Liber's textbook: notes I wrote for my students at Peabskolan: theory and exercises.
- January 2017, Repetitionshäfte Matte2a (17 pages), based on Liber's textbook: notes I wrote for my students at Peabskolan: theory and exercises.
- Academic year 2018/19, Lecture Notes in Several-variable Calculus (both 10 credits and 5 credits) based on the LaTeX-code by Pouya Ashraf. The links to my lecture notes and to the original notes by Pouya:

http://www.wehlou.com/hania/files/uu/forelasningar\_flervarre10hp.pdf http://www.wehlou.com/hania/files/uu/forelasningar\_flervarre5hp.pdf http://www.wehlou.com/hania/files/uu/Pouya\_original.pdf

The first two documents can be compared to the third one in order to estimate my contribution.

- Fall 2019, adapting study material to Adams *Calculus* 5th edition by Anders Vretblad from 2003 to a compiling *LaTeX*-version for Adams *Calculus* 9th edition (51 pp, with some additional pictures).
- January–March 2020, Lecture notes in *Vektoralgebra*, based on former notes by Johan Richter. The links to my lecture notes and to the original notes by Johan:

http://www.wehlou.com/hania/files/uu/Anteckningar\_Vektoralgebra\_MDH\_VT20.pdf http://www.wehlou.com/hania/files/uu/Anteckningar\_Vektoralgebra\_MDH\_JohanR.pdf

The first document can be compared to the second one in order to estimate my contribution.

- Academic year 2020/21 (planned), a compendium on polynomials and rational functions for undergraduate students.
- March-May 2020, Lecture Notes in Several-variable Calculus (7,5 credits). http://www.wehlou.com/hania/files/uu/anteckningar\_flervarre\_MDH.pdf
- March-May 2020, 54h recorded lectures and classes in Several-variable Calculus.

### XVII. CONFERENCE TALKS AND PRESENTATIONS ON iotaMed:

• 2012-04-17: Presentation *iotaMed*, quality registries and Snomed CT (jointly with Martin Wehlou) at the largest healthcare IT congress Vitalis in Gothenburg: http://youtu.be/gdxmccOZ6xg (in Swedish).

# XVIII. TALKS, ASSIGNMENTS AND PUBLICATIONS ON MATHEMATICAL TER-MINOLOGY AND DIDACTICS:

- 2016-04-11: Presentation Översättarverkstan: autismens språk matematikens språk (on translating mathematical terminology) at the seminar on Polish language at Stockholm University (Department of Slavic Languages). Invited by Professor Maria Zadencka. https://vimeo.com/162868038/b47d9f35ff (in Swedish).
- 2016-09: I examined the translation (from Swedish into Polish) of the survey materials which will be used for establishing the level of maths skills of Polish children who are newly moved from Poland to Sweden. I got this assignment from Skolverket (the Swedish National Agency for Education).
- Kiselman, Christer O., Uscka-Wehlou, Hania, 2017. Bråk och språk-vad som är förnuftigt och logiskt. In Nämnaren (journal for maths teachers) 2017:1, pp. 45–49. Göteborg: Göteborgs universitet, Nationellt centrum för matematikutbildning.
- Kiselman, Christer O., Uscka-Wehlou, Hania, 2017. Falska vänner, vassa vrår och språkliga fällor. In Nämnaren 2017:2, pp. 43–51. Göteborg: Göteborgs universitet, Nationellt centrum för matematikutbildning.
- 2017-05-12: Presentation *Mathematics and languages* during a conference for teachers of the Polish language in Sweden organized by Stockholm University and the Swedish Institute: https://vimeo.com/217304561 (in Swedish).
- 2017-10-06: Presentation and workshop *Interactions between mathematics and languages in learning and teaching* for native-language teachers in Södertälje (3 hours: a lecture plus workshop for about 90 teachers teaching about 40 different languages). Invited by Mary-Anne Eliasson.
- 2017-10-30: Lecture *How uninterrupted is continuous?* for high-school teachers in mathematics at Uppsala University. Invited by Veronica Crispin Quinonez.

- Uscka-Wehlou, Hania, 2018. Svansklippning och andra förtjusande matematiska aktiviteter. In Nämnaren (journal for maths teachers) 2018:1, pp. 55–61. Göteborg: Göteborgs universitet, Nationellt centrum för matematikutbildning.
- 2018-01-25-26: Presentation Languages for mathematics: sometimes helpful, sometimes not; with examples from several European languages during a conference for maths teachers Matematikbiennalen 2018 in Karlstad.
- 2018-02-06: Presentation Interactions between mathematics and languages in learning and teaching for students of the teacher training progr. at Uppsala University.
- 2018-02: Referee report on About evolution of Matura examinations in Mathematics in the years 1789–1935 for the journal Antiquitates Mathematicae (Annales Societatis Mathematicae Polonae Series).
- 2018-10-30: Lecture Matematik- och  $fysikprovet\ KTH/Chalmers\ (+SU\ sedan\ 2017)$  for high-school teachers in mathematics at UU. Invited by Veronica Crispin Quinonez.
- 2019-05: Referee report on At the Roots of Mathematics in the Lithuanian Language: Mathematics Textbooks by President Antanas Smetona for the journal Antiquitates Mathematicae (Annales Societatis Mathematicae Polonae Series).

## XIX. PEDAGOGICAL ACTIVITIES AT MDH 2020-

- Spring 2020: member of a group at the Department of Mathematics at MDH appointed to develop a plan of action in order to improve study results in mathematics of the students of engineering programs (*Plan för högre genomströmning med bibehållen kvalitet i matematikkurser på teknikprogram*); together with Kimmo Eriksson, Hillevi Gavel, Erik Janse and Henrik Brandén.
- Spring 2020: started a channel *Matematik på MDH* at **MDH** Play for recorded lectures in mathematics.
- Autumn 2020: pedagogical project *Math Matters* together with Milica Rančić. The aim of the project is to make a map of usage of mathematics in other courses in the engineering programs in order to motivate ours students to study maths.

### XX. OTHER (non-mathematical) LANGUAGE RELATED PRESENTATIONS:

• 2016-09-26: Lecture (in Swedish) about languages Polish and Dutch during the European Day of Languages 2016 at Lundellska Gymnasiet in Uppsala (for 17-year old Swedish speaking students; on invitation of language teachers: Ewa Charlotte Berg and Anna Gullefors).

### XXI. REFERENCES:

- Professor Christer Kiselman (my main advisor during my PhD studies), Uppsala, Sweden; christer.kiselman@it.uu.se, 070-887.07.08.
- Inger Sigstam, PhD, Director of Studies and Senior Lecturer in mathematics at Uppsala University (my direct supervisor during the academic years 2017/18 and 2018/19), Inger.Sigstam@math.uu.se, 018-471.32.23.

- Milica Rančić, PhD, Head of Division for Division of Applied Mathematics at Mälardalen University (my direct supervisor from the Fall Semester 2019), milica.rancic@mdh.se, 021-10.73.53.
- Leif Abrahamsson, PhD (program director at International Science Program; he was the main lecturer for the courses I taught during my PhD studies), Uppsala, Sweden; Leif.Abrahamsson@isp.uu.se, 070-167.91.16.