Juha-Matti Huusko Kekkolantie 22a3, 40520 Jyväskylä <u>juha-matti.huusko@iki.fi</u> +358 40 528 2815

# **Curriculum vitae**

- 1. Full name and date
  - o Huusko, Juha-Matti Aleksanteri
  - o ORCID: https://orcid.org/0000-0001-8389-6436
  - o gender: male
  - o This document has been made 20.4.2023.
- 2. Date and place of birth, nationality, current residence
  - o born: 20.04.1987, Kuhmo, Finland
  - o nationality: Finnish
  - o current residence: Kekkolantie 22a3, 40520 Jyväskylä
- 3. Education and degrees awarded
  - o PhD, University of Eastern Finland, mathematics, 6/2017
  - o MSc, University of Eastern Finland, teacher of mathematics and physics, 9/2013
  - o BSc, University of Eastern Finland, 2/2011
- 4. Other education and training, qualifications, and skills
  - o BC driving license, European
  - Excellent IT skills
    - 1. general programming: MATLAB
    - 2. webpages: HTML, CSS, Javascript, PHP, Wordpress
    - 3. typesetting: LaTeX, MathJax, self-made MathJax-editor
    - 4. visualizations: JSXGraph, TikZ, Three.js
- 5. Linguistic skills
  - o Mother tongue: Finnish native
  - Other languages: English (fluent), Swedish (basic), German (basic), Bengali (basic)
- 6. Current position
  - university teacher, Aalto University, Finland, 10/2022-8/2023 (teaching Differential and integral calculus, 5 ECTS)
  - university teacher, University of Eastern Finland, 6/2022-6/2023 (UpTech, developing engineering studies)
- 7. Previous work experience
  - o university teacher, University of Eastern Finland, 6/2021-5/2022 (online course materials)
  - hourly paid teacher, University of Eastern Finland, 9/2020-5/2021
  - o university teacher, University of Eastern Finland, 8/2019 7/2020 (online course materials)
  - o postdoctoral researcher, University of Eastern Finland, 12/2018 7/2019
  - o IT support person, University of Eastern Finland, 2/2018 12/2018
  - o postdoctoral researcher, University of Eastern Finland, 7 9/2017
  - early-stage researcher, University of Eastern Finland, 10/2013 6/2017 (full time doctoral student, teaching 80 hours per year, funding: UEF doctoral school)
- 8. Research funding as well as leadership and supervision
  - o second supervisor of one doctoral student 9/2021 –
  - o travel grant, 2500€, Väisälä, 2019
  - o University of Eastern Finland, doctoral school funding 10/2013-6/2017
  - o travel grant, 1000€, Oskar Öflunds Stiftelse, CMFT-2017 participation
- 9. List of publications

- Pesonen, H.A., J.-M. Huusko, X. Zang, A.T. Friberg, J. Turunen and T. Setälä, Partial spectral and temporal coherence of plane-wave pulse trains in second-harmonic generation, J. Opt. (2021).
- Hu, G., J.-M. Huusko, J. Long, Y. Sun, Linear differential equations with solutions lying in weighted Fock spaces, Comp. Var. Ell. Eq., Volume 66, 2021.
- Pesonen, H., A. Halder, J.-M. Huusko, A.T. Friberg, T. Setälä and J. Turunen, Spatial coherence effects in secondharmonic generation of scalar light fields, Journal of Optics, Volume 23, Number 3.
- Huusko, J.-M., T. Vesikko, On Becker's univalence criterion, Journal of Mathematical Analysis and Applications, 458 (1), 781-794.
- Huusko, J.-M., Methods for complex ODEs based on localization, integration and operator theory, Publications of the University of Eastern Finland. Dissertations in Forestry and Natural Sciences, 268 (2017).
- Gröhn, J., J-M. Huusko, J. Rättyä, Linear differential equations with slowly growing solutions, Trans. Amer. Math. Soc. 370 (2018), 7201-7227.
- Huusko, J.-M. and M. Martin, Criteria for bounded valence of harmonic mappings, Comput. Methods Funct. Theory (2017).
- Huusko, J.-M., T. Korhonen, A. Reijonen, Linear Differential Equations with Solutions in the Growth Space, Ann. Acad. Sci. Fenn. Math. 41 (2016), no. 1, 399 416.
- Huusko, J.-M., Localisation of Linear Differential Equations in the Unit Disc by a Conformal Map, Bull. Aust. Math. Soc. 93 (2016), 260–271.

## 10. Merits in teaching and pedagogical competence

- o qualified teacher of mathematics and physics, pedagogical studies 60 ECTS
- o supervision and evaluation of bachelors' thesis
- lecturer, 38 ECTS in total: Differential and Integral Calculus, Introduction to Topology,
   Algebra a, Euclidean geometry, Measure and Integration Theory a, Basic Course in Fourier
   Analysis, Differential Calculus in Several Variables
- assistant, 36 ECTS in total: Analysis III, Numerical Analysis, Topology, Complex Analysis a, Introduction to Mathematics and Primitive Analysis
- creating online courses: Integral calculus (4 ECTS), Basics of Mathematics (5 ECTS, 80%),
   Linear Algebra a and b (9 ECTS), Basics of Numerical Calculations (3 ECTS), Data and Error Analysis in Natural Sciences (3 ECTS).
- typesetting of course materials for many courses (e.g. introduction to univalent functions, 120 pages, solutions to exercises in Fourier analysis, 64 pages)

#### 11. Other academic merits

- Editor-in-chief, Metodologia, a peer-reviewed international journal of methodology, 2020-
- o Editor-in-chief, UEFDSA newspaper, 2019-2021
- Mathematical reviews -reviewer
- o referee for the journal J. Math. Anal. Appl.
- student tutor (2008, 2009, 2010), speech to new students in mathematics and physics (2015, 2016, 2017)
- university representation for high school students
- o working in SciFest science festival (2011, 2012, 2013, 2018)

#### 12. International experience

- o conferences in Joensuu: 2012, 2014, 2015, 2016, 2018 (poster)
- o mathematics research seminar in Joensuu, 2013-2+17 (5 talks)
- Normal families, Würzburg, 5/2015 (poster)
- o Indian Statistical Institute, Chennai Centre (informal visit)
- CMFT-2017, Lublin, 7/2017 (talk)
- Analysis Near the Pole, Svalbard, 8/2018 (talk)
- Chinese-Finnish workshop in complex analysis, Beijing, 8/2017 (talk)

- New Developments in Complex Analysis and Function Theory, Heraclion 7/2018 (poster)
- o International JSXGraph Conference 5.-7.10.2021 (talk)
- o Finnish Mathematical Days 2022 (talk)

### **Academic recommendations**

Risto Korhonen, professor (current supervisor)
Department of Physics and Mathematics, University of Eastern Finland, Joensuu email. <a href="mailto:risto.korhonen@uef.fi">risto.korhonen@uef.fi</a>
tel. +358 50 442 2684
<a href="https://uefconnect.uef.fi/en/person/risto.korhonen/">https://uefconnect.uef.fi/en/person/risto.korhonen/</a>

Janne Gröhn, university lecturer (colleague)
Department of Physics and Mathematics, University of Eastern Finland, Joensuu email. janne.grohn@uef.fi
tel. +358 50 439 7914
<a href="https://uefconnect.uef.fi/en/person/janne.grohn/">https://uefconnect.uef.fi/en/person/janne.grohn/</a>