Curriculum Vitae

2024-02-02

LINDA Katarina **LUNDSTRÖM** (née Franzén)

Born July 27 1978, Sweden
married, two children
+46 (0)73 683 70 41
linda@biox.kth.se

KTH, Kungliga Tekniska Högskolan
Dept of Applied Physics
Albanova, Roslagstullsbacken 21
SE-106 91 Stockholm

ACADEMIC DEGREES

Docent in Visual Optics, KTH	2015
PhD in Physics, KTH	2002 – 2007
MSc in Engineering Physics, KTH	1997 – 2002

EMPLOYMENT

Professor in Applied Physics, KTH	2021 –
Associate Professor in Applied Physics, KTH	2015 – 2021
Assistant professor in Applied Physics, KTH Funded by VINNOVA & VR. Parental leave 12 months (2010-2012).	2009 – 2015
Experienced researcher (postdoctoral position) in the "My Europia" project, European Marie Curie research training at LOUM - Laboratory of Optics, University of Murcia, Spain	2007 – 2009
Part-time consultant for Bausch & Lomb	2006 – 2007

MANAGEMENT DUTIES

Head of division, KTH (deputy head 2018 – 2022) The Bio-Opto-Nano Physics division and earlier Biomedical and X-Ray Physics consisting of ~30-40 persons	2022 –
Elected faculty representative in the SCI school-counsel, KTH	2020 – 2023
Member of the Appointment Board, KTH Preparatory body to the president of KTH for new employments, promotions, and docentships	2019 – 2022
Gender Mainstreaming, School of Engineering Sciences, KTH Project leader 2019-2020. Coordinator of female network 2017-2023.	2017 – 2023
Deputy head of studies, Karolinska Institutet (KI) & KTH 15 credits given yearly for approximately 60 optometry students	2014 –

RESEARCH EXPERIENCE and ACHIEVEMENTS

- Construction of Hartmann-Shack wavefront sensors, alignment of adaptive optics system.
- Measurements and correction of on- and off-axis optical aberrations in the human eye.
- Development of psychophysical routines for visual evaluation over the visual field.
- **45 articles** (four top-downloaded for *Clin Exp Optom* 2018-2019 & *JOSA A* 2022-2023), >70 conference contributions, >20 invited talks, **1 book chapter**. h-index: 25
- **1 patent** on a lens design to prevent myopia progression (US 8,662,664 B2). 1 provisional application for patent on test methodology of intraocular lenses (JSV 7147 USPS P1)

RESEARCH GRANTS and AWARDS

The Swedish Research Council (VR): projektbidrag 2023-05428 (Salary for one PhD student and material)	2024-2027
European Commission HORIZON-MSCA-2022-DN-01: network coordinator in ACTIVA (salary for 2 three-year PhD-positions + expenses)	2023-2027
Kronprinsessan Margaretas Arbetsnämnd för synskadade: Bidrag	2022
Ögonfonden: Bidrag	2022
The Swedish Research Council (VR): projektbidrag 2019-05354 (Salary for one PhD student and material)	2020-2023
21st International Congress on Wavefront & Presbyopic Refractive Corrections: Best paper award	2020
Stiftelsen Märta och Nils Barthelsons minne: Award	2017
European Commission H2020-MSCA-ITN-2015: network partner in the MyFUN project (salary for 2 three-year PhD-positions + expenses)	2016-2019
The Swedish Research Council (VR): projektbidrag 621-2011-4094 unga forskare (75 % of my salary or salary for one PhD student)	2012-2015
European Commission FP7-PEOPLE-2010-ITN: network partner in the OpAL project (salary for 2 three-year PhD-positions + expenses)	2011-2015
Göran Gustafsson foundation: Young researcher award	2011
Leif Jonssons minnesfond (material expenses)	2010
VINNOVA: VINNMER programme – international researcher qualification for female doctoral researchers (50 % of my salary + expenses)	2009-2012

COMMISSIONS of TRUST

- **Associate Editor** for *Biomed Opt Express* since 2020. Special issue editor *J Mod Opt* 2010 and *J Opt Soc Am A* 2023.
- **Reviewer** for 16 international journals: *Appl Opt, Biomed Opt Express, Clin Exp Optom, Invest Ophthalmol Vis Sci* (*2015 & 2016), *J Biomedical Optics, J Clin Med, J Mod Opt, J Opt Soc Am A*, *J Vision* (* 2016), *J Ophthalmol, Ophthal Physiol Opt*, *Opt Express, Opt Lett*, *Optom Vis Sci*, *Perception,* and *Vision Res*. (*="Exceptionally Good Review")
- **Organizer** of the 5th Visual and Physiological Optics conference (VPO) 2010, Stockholm.
- **Scientific committee member** for the VPO conferences: 2010 Stockholm, 2012 Dublin, 2014 Wroclaw, 2016 Antwerp, 2018 Athens, 2022 Cambridge, 2023 Antwerp.
- **Moderator** at ARVO Seattle 2016 paper session 431, at the 8th VPO Antwerp 2016, and at the 16th International Myopia Conference Birmingham 2017.
- **Independent expert** for faculty employment and promotion at University of South-Eastern Norway 2022 and at Umeå University 2023.
- **Invited expert** in the committee SIS-TK 336 for the Swedish Standards Institute 2014-2021.
- **Invited expert** in the white paper committee of the International Myopia Institute since 2016, coordinated by Brien Holden Vision Institute Australia (www.myopiainstitute.org).
- **Member** in Sancta Lucia Gille, a lord of honor of invited-members-only for the benefit of the optometry occupation in Sweden (www.sanctaluciagille.se)
- **Invited lecturer/presenter** at e.g. Annual meeting of ARVO 2023, OBERON Summer Conference Cambridge 2022, Nordic Pediatric Ophthalmology Group 20th meeting Stockholm 2022, OSA's Vision Technical Group virtual weekly series 2020, "Wavefront Congress" California 2020, "ROOF" Moscow 2018, "ISER" Belfast 2018, "OSA: Developments in Optics and Communications" Riga 2018, "13th International Myopia Conference" Tübingen 2010, "5th European Meeting on Visual and Physiological Optics" Stockholm 2010. + >10 national meetings.

- **Examiner and Faculty opponent of doctoral theses:**

Examiner for PhD Candidate *Adil Baitenov*, KTH, Sweden, supervisor Prof. Sergei Popov	2023
Examiner for PhD Candidate *Pelsin Demir*, Linnaeus University, Sweden, supervisor Assoc. Prof. Antonio Filipe Teixeira Macedo	2022
Examiner for PhD Candidate *Durgasri Jaisankar*, Queensland University of Technology, Australia, supervisor Prof. David A Atchison	2021
Examiner for PhD Candidate *Rohan Hughes*, Queensland University of Technology, Australia, supervisor Assoc. Prof. Stephen Vincent	2020
Examiner/opponent for PhD Candidate *Pusti Dibyendu,* University of Murcia, Spain, supervisor Prof. Pablo Artal	2019
Examiner for PhD Candidate *Rebecka Rosén*, Dept of Clinical Neuroscience, Karolinska Institutet, Sweden, supervisor Senior Lecturer Maria Nilsson	2018
Opponent for PhD Candidate *Tomasz Kozłowski*, Lund University, Sweden, supervisor Prof. Ronald H.H. Kröger	2018
Examiner for PhD Candidate *Uchechukwu Levi Osuagwu*, Queensland University of Technology, Australia, supervisor Prof. David A Atchison	2017
Examiner for PhD Candidate *Zhaohua Yu*, Dept of Neuroscience, Uppsala University, Sweden, supervisor Prof. Per Söderberg	2017
Examiner for Lic Candidate *Curry Bucht*, Inst. f. Neurovetenskap, Karolinska Institutet, Sweden, supervisor Prof. Per Söderberg	2010
Examiner for PhD Candidate *Ankit Mathur*, Queensland University of Technology, Australia, supervisor Prof. David A Atchison	2009

SUPERVISOR and TEACHER

Supervisor to PhD students (* = main advisor)

Anna-Caisa Söderberg, Mittuniversitetet, Sweden	2022 –
Charlie Börjeson, KTH*	2021 –
Dmitry Romashchenko, KTH*	2016 – 2021
Petros Papadogiannis, KTH*	2016 – 2021
Abinaya Priya Venkataraman, KTH*	2012 – 2016
Simon Winter, KTH*	2012 – 2016
Peter Lewis, Linnaeus University, Sweden	2008 – 2016
Robert Rosén, KTH	2008 – 2013
Bart Jaeken, University of Murcia, Spain	2007 – 2012

Teaching (50% of employment 2015-2022, 30% since 2023)
Optics courses for optometry- and MSc-students at Karolinska Institutet (KI) and KTH.

Advisor to students' theses

BSc students: *Johanna Kifle & Younes Merouani*, KI	2023-2024
BSc students: *Gulled Abdillahi*, KI	2023-2024
MSc student: *Moa Volny*, KTH	2022
MSc students: *Eva Sturk-Franzén & Anna-Caisa Söderberg*, KI	2021-2022
MSc student: *Charlie Börjeson*, KTH	2020
BSc students: *Robert Kluge & Amanda Mölder*, KI	2020-2021
MSc student: *Anna Zalamans Akkawi,* Tobii and KTH	2019
BSc student: *Britta Persson*, KI	2018-2019
BSc students: *Linda Hirsch & Matilda Hilden*, KI	2017-2018
BSc students: *Linnea Johansson & Mei-Li Holmberg,* KTH	2017
MSc student: *Anna Hamberg,* Tobii and KTH	2014 – 2015
MSc student: *Bita Daemi*, KTH	2009 – 2010
MSc exchange student at KTH: *Martin Buschbeck*	2006 – 2007

BSc-thesis, University of Applied Sciences in Darmstadt, Germany
BSc student: *Caroline Jarkö*, KI 2006
BSc student: *Jenny Söderlindh*, KI 2005
MSc student: *Otto Manneberg*, KTH 2005
BSc student: *Ingrid Svensson*, KI 2003

OTHER EXPERIENCES

Industry co-operation
Tobii Tech AB – research presentations 2019 – 2020
Alcon - part-time consultant 2018 – 2019
Johnson & Johnson – vision evaluation 2017 –
Swedish Standards Institute – invited expert SIS-TK 336 2014 –2021
Abbott Medical Optics – vision evaluation 2014 – 2016
Rodenstock GmbH – lens evaluation 2011 – 2015
Bausch & Lomb Nordic AB – part-time consultant 2006 – 2007
Languages: Swedish, English, German, Spanish
Computer skills:
Advanced user of MS-Office, user of LaTeX and statistical software. Programming in Matlab, Labview, WinVis, and optical design software (Winlens, Synopsis, Zemax)

PUBLICATIONS

ORCID:0000-0002-4894-7944 scholar.google.se/citations?user=k0RMe5IAAAAJ&hl

Publications in international peer-reviewed journals:

1. N. Sharmin, P. Papadogiannis, D. Romashchenko, L. Lundström, B. Vohnsen "Parafoveal and perifoveal accommodation response to defocus changes induced by a tunable lens" accepted for publication in Applied Sciences (2023).
2. D. Christaras, S. Tsoukalas, P. Papadogiannis, C. Börjeson, M. Volny, L. Lundström, P. Artal, H. Ginis "Central and peripheral refraction measured by a novel double pass instrument" Biomed. Opt. Express 14, 2608-2617 (2023).
3. P. Papadogiannis, C. Börjeson, L. Lundström "Comparison of optical myopia control interventions: effect on peripheral image quality and vision" Biomed. Opt. Express 14, 3125-3137 (2023).
4. C. Börjeson, D. Romashchenko, P. Unsbo, L. Lundström "Implementing a non-4f relay system for Hartmann-Shack wavefront sensing" J. Opt. Soc. Am. A 40, D1-D6 (2023).
5. S. Marcos, P. Artal, D.A. Atchison, K. Hampson, R. Legras, L. Lundström, G. Yoon "Adaptive Optics Visual Simulators: A review of recent optical designs and applications" Biomed. Opt. Express 13, 6508-6532 (2022).
6. P. Papadogiannis, D. Romashchenko, S. Vedhakrishnan, B. Persson, A. Lindskoog Pettersson, S. Marcos, L. Lundström "Foveal and peripheral visual quality and accommodation with multifocal contact lenses" J. Opt. Soc. Am. A 39, B39-B49 (2022).
7. D. Romashchenko, P. Papadogiannis, P. Unsbo, L. Lundström "Simultaneous measurements of foveal and peripheral aberrations with accommodation in myopic and emmetropic eyes" Biomed. Opt. Express 12(12), 7422-7433 (2021).
8. A.P. Venkataraman, R. Rosén, A. Alarcon Heredia, P. Piers, C. Canovas Vidal, L. Lundström "Peripheral vision and hazard detection with average phakic and pseudophakic optical errors" Biomed. Opt. Express 12(6), 3082-3090 (2021).
9. D. Romashchenko, L. Lundström "Dual-angle open field wavefront sensor for simultaneous measurements of the central and peripheral human eye" Biomed. Opt. Express 11, 3125-3138 (2020).
10. P. Papadogiannis, D. Romashchenko, P. Unsbo, L. Lundström "Lower sensitivity to peripheral hypermetropic defocus due to higher order ocular aberrations" Ophthalmic Physiol. Opt. 40(3):300-307 (2020).
11. D. Romashchenko, R. Rosén, L. Lundström "Peripheral refraction and higher order aberrations" Clin. Exp. Optom. doi: 10.1111/cxo.12943 (2019).
12. A.P. Venkataraman, P. Papadogiannis, D. Romashchenko, S. Winter, P. Unsbo, L. Lundström "Peripheral resolution and contrast sensitivity: Effects of monochromatic and chromatic aberrations" J. Opt. Soc. Am. A 36(4), B52-57 (2019).
13. J.S. Wolffsohn, P.S. Kollbaum, D.A. Berntsen, D.A. Atchison, A. Benavente, A. Bradley, H. Buckhurst, M. Collins, T. Fujikado, T. Hiraoka, M. Hirota, D. Jones, N.S. Logan, L. Lundström, H. Torii, S.A. Read, K. Naidoo. "IMI - Clinical Myopia Control Trials and Instrumentation Report" Invest. Ophthalmol. Vis. Sci. 60:M132–M160 (2019).
14. P. Lewis, A.P. Venkataraman, L. Lundström, "Contrast Sensitivity in Eyes with Central Scotoma: Effect of Stimulus Drift" Optom. Vis. Sci. 95(4), 354-361 (2018).
15. A.P. Venkataraman, A. Radhakrishnan, C. Dorronsoro, L. Lundström, S. Marcos, "Role of Parafovea in Blur Perception" Vision Res. 138, 59-65 (2017).
16. A.P. Venkataraman, P. Lewis, P. Unsbo, L. Lundström, "Peripheral resolution and contrast sensitivity: Effects of stimulus drift" Vision Res. 133, 145-9 (2017).
17. S. Marcos, J.S. Werner, S.A. Burns, W.H. Merrigan, P. Artal, D. Atchison, K.M. Hampson, R. Legras, L. Lundström, G. Yoon, J. Carroll, S.S. Choi, N. Doble, A.M. Dubis, A. Dubra, A.E. Elsner, R. Jonnal, D.T. Miller, M. Paques, H.E. Smithson, L.K. Young, Y. Zhang, M.

Campbell, J. Hunter, A. Metha, G. Palczewska, J. Schallek, L.C. Sincich, "Vision Science and Adaptive Optics, The State of the Field" Vision Res. 132, 3-33 (2017).
18. L. Lundström, R. Rosén, "Peripheral Aberrations" Chapter 21 in "Handbook of Visual Optics, Volume One: Fundamentals and Eye Optics" edited by P. Artal (2017).
19. S. Winter, R. Sabesan, P.N. Tiruveedhula, C. Privitera, P. Unsbo, L. Lundström, A. Roorda, "Transverse chromatic aberration across the visual field of the human eye", J. Vision 16(14), 9 (2016).
20. M. van der Mooren, R. Rosén, L. Franssen, L. Lundström, P.A. Piers, "Degradation of visual performance with increasing levels of retinal stray light", Invest. Ophthalmol. Vis. Sci. 57(13), 5443-5448 (2016).
21. A.P. Venkataraman, S. Winter, R. Rosén, L. Lundström, "Choice of grating orientation for evaluation of peripheral vision", Optom. Vis. Sci. 93(6), 567-574 (2016).
22. S. Winter, M. Taghi Fathi, A.P. Venkataraman, R. Rosén, A. Seidemann, G. Esser, L. Lundström, P. Unsbo, "Effect of induced transverse chromatic aberration on peripheral vision", J. Opt. Soc. Am. A 32(10), 1764-1771 (2015).
23. A.P. Venkataraman, S. Winter, P. Unsbo, L. Lundström, "Blur Adaptation: Contrast Sensitivity Changes and Stimulus Extent", Vision Res. 110, 100-106 (2015).
24. R. Rosén, L. Lundström, A.P. Venkataraman, S. Winter, P. Unsbo, "Quick contrast sensitivity measurements in the periphery", J. Vision 14(8), 3 (2014).
25. P. Lewis, K. Baskaran, R. Rosén, L. Lundström, P. Unsbo, J. Gustafsson, "Objectively Determined Refraction Improves Peripheral Vision", Optom. Vis. Sci. 91, 740-746, (2014).
26. R. Rosén, L. Lundström, P. Unsbo, "Sign-dependent sensitivity to peripheral defocus for myopes due to aberrations", Invest. Ophthalmol. Vis. Sci., 53:7176-7182 (2012).
27. R. Rosén, B. Jaeken, A. Lindskoog Pettersson, P. Artal, P. Unsbo, L. Lundström, "Evaluating the peripheral optical effect of multifocal contact lenses", Ophthalmic Physiol. Opt. 32:527-534 (2012).
28. R. Rosén, L. Lundström, P. Unsbo, "Adaptive optics for peripheral vision", J. Mod. Opt. 59:1064–1070 (2012).
29. R. Rosén, L. Lundström, P. Unsbo, D.A. Atchison, "Have we misinterpreted the study of Hoogerheide et al. (1971)?", Optom. Vis. Sci. 89:1235–1237 (2012).
30. B. Jaeken, L. Lundström, P. Artal, "Peripheral aberrations in the human eye for different wavelengths: off-axis chromatic aberration", J. Opt. Soc. Am. A 28:1871-1879 (2011).
31. A. Lindskoog Pettersson, M.W. Ramsay, L. Lundström, R. Rosén, M. Nilsson, P. Unsbo, R. Brautaset "Accommodation in young adults wearing aspheric multifocal soft contact lenses", J. Mod. Opt. 58:1804-1808 (2011).
32. L. Lundström, R. Rosén, K. Baskaran, B. Jaeken, J. Gustafsson, P. Artal, P. Unsbo, "Symmetries in peripheral ocular aberrations", J. Mod. Opt. 58:1690-1695 (2011).
33. B. Jaeken, L. Lundström, P. Artal, "Fast scanning peripheral wave-front sensor for the human eye", Opt. Express, 19(8):7903-7913 (2011).
34. R. Rosén, L. Lundström, P. Unsbo, "Influence of optical defocus on peripheral vision", Invest. Ophthalmol. Vis. Sci., 52:318-323 (2011).
35. L. Lundström, J. Gustafsson, P. Unsbo, "Population distribution of wavefront aberrations in the peripheral human eye", J. Opt. Soc. Am. A, 26(10):2192-2198 (2009).
36. L. Lundström, A. Mira-Agudelo, P. Artal, "Peripheral optical errors and their change with accommodation differ between emmetropic and myopic eyes", J. Vision, 9(6):17 (2009).
37. A. Mira-Agudelo, L. Lundström, P. Artal, "Temporal dynamics of ocular aberrations: monocular vs binocular vision", Ophthal. Physiol. Opt., 29:256-263 (2009).
38. L.S.V. Roth, L. Lundström, A. Kelber, R.H.H. Kröger, P. Unsbo, "The pupils and optical systems of gecko eyes", J. Vision, 9(3):27 (2009).
39. L. Lundström, S. Manzanera, P. M. Prieto, D. B. Ayala, N. Gorceix, J. Gustafsson, P. Unsbo, P. Artal, "Effect of optical correction and remaining aberrations on peripheral resolution acuity in the human eye", Opt. Express, 15, pp 12654-12661 (2007).

40. L. Lundström, J. Gustafsson, P. Unsbo, "Vision evaluation of eccentric refractive correction", Optom. Vis. Sci., 84, pp 1046-1052 (2007).
41. L. Lundström, P. Unsbo, "Transformation of Zernike coefficients: scaled, translated, and rotated wavefronts with circular and elliptical pupils", J. Opt. Soc. Am. A, 24, pp 569-577 (2007).
42. L. Lundström, P. Unsbo, J. Gustafsson, "Off-axis wave front measurements for optical correction in eccentric viewing", J. Biomed. Opt., 10**,** 034002 (2005).
43. L. Lundström, J. Gustafsson, I. Svensson, P. Unsbo, "Assessment of objective and subjective eccentric refraction", Optom. Vis. Sci., 82**,** pp 298-306 (2005).
44. L. Lundström, P. Unsbo, "Unwrapping Hartmann-Shack images from highly aberrated eyes using an iterative B-spline based extrapolation method", Optom. Vis. Sci., 81, pp 383-388 (2004).
45. L. Lundström, P. Unsbo, J. Gustafsson, "Measuring peripheral wavefront aberrations in subjects with large central visual field loss", Proc. SPIE Int. Soc. Opt. Eng. 5314, 209-219 (2004).

Conference contributions:

1. L. Lundström, "Currently proposed mechanisms and remaining unknowns for optical myopia control treatment – not just peripheral defocus" invited talk on Annual meeting of ARVO, 2023.
2. L. Lundström, D. Romashchenko, M. van der Mooren, P. Unsbo, C. Börjeson, C. Canovas, "Through-focus visual acuity with intraocular lenses in a compact see-through system compared to clinical data" oral presentation on Annual meeting of ARVO, 2023.
3. D. Romashchenko, P. Papadogiannis, M.D. Jenkins Sanchez, L. Lundström, M. van der Mooren, C. Canovas "Through-focus evaluation of IOL-induced visual symptoms in a see-through system" Poster presentation on Annual meeting of ARVO, 2023.
4. C. Börjeson, P. Papadogiannis, D. Christaras, L. Lundström, "Peripheral image quality in three types of myopia control spectacles" paper P148, 18th International Myopia Conference, Rotterdam, 2022.
5. P. Papadogiannis, C. Börjeson, L. Lundström, "Effect of optical myopia-control interventions on peripheral vision" talk, 18th International Myopia Conference, Rotterdam, 2022.
6. L. Lundström, A.P. Venkataraman, R. Rosén, M. van der Mooren, A. Alarcon, C. Canovas, "Effect of peripheral optical errors on vision in age-related macular degeneration (AMD)" talk, 10th VPO, Cambridge, 2022.
7. C. Börjeson, D. Romashchenko, P. Unsbo, L. Lundström, "Implementing a non-4f relay system for Hartmann-Shack wavefront sensing" talk, 10th VPO, Cambridge, 2022.
8. D. Christaras, M. Volny, C. Börjeson, P. Papadogiannis, L. Lundström, H. Ginis, "Central and peripheral refraction measured by a double pass instrument: comparison with a Hartmann-Shack aberrometer" talk, 10th VPO, Cambridge, 2022.
9. D. Romashchenko, M.D. Jenkins Sanchez, L. Lundström, M. van der Mooren, C. Canovas Vidal, "Objective comparison of two setups for evaluation of positive dysphotopsia from intraocular lenses" Poster presentation on Annual meeting of ARVO, 2022.
10. L. Lundström, D. Romashchenko, M. van der Mooren, P. Unsbo, C. Börjeson, C. Canovas, "Compact telescopic system for subjective evaluation of intraocular lens designs" Poster presentation on Annual meeting of ARVO, 2022.
11. A. Alarcon, C. Canovas, M. van der Mooren, P. Janakiraman, R. Rosén, L. Lundström, D. Chang, "Clinical measurements of peripheral contrast sensitivity in elderly phakic and pseudophakic eyes" Paper presentation on Annual meeting of ARVO, 2022.
12. C. Börjeson, D. Romashchenko, L. Lundström, "Design of a compact open-field wavefront sensor" Poster presentation on Annual meeting of ARVO, 2021.

13. L. Lundström, A.P. Venkataraman, R. Rosén, A. Alarcon, P. Piers, C. Canovas, "Peripheral optical errors and hazard perception" Paper presentation on Annual meeting of ARVO, 2021.
14. A.P. Venkataraman, R. Rosén, A. Alarcon, C. Canovas, P. Piers, L. Lundström, "Impact of peripheral optical errors in AMD and healthy eyes" Poster presentation on Annual meeting of ARVO, 2021.
15. L. Lundström, "Focus on the Periphery" invited talk, Wavefront Congress, California, 2020.
16. L. Lundström, "Peripheral Optical Errors and Myopia" talk, Wavefront Congress, California, 2020.
17. D. Romashchenko, R. Rosén, L. Lundström, "Peripheral Refraction and Higher-order Aberrations: Where Do Myopes Differ?" poster P169, 17th International Myopia Conference, Tokyo, 2019.
18. P. Papadogiannis, D. Romashchenko, P. Unsbo, L. Lundström, "Effect of Chromatic and Monochromatic Aberrations on Detecting the Sign of Defocus in the Periphery" talk O064, 17th International Myopia Conference, Tokyo, 2019.
19. L. Lundström, P. Papadogiannis, S. Vedhakrishnan, D. Romashchenko, B. Persson, A. Lindskoog Pettersson, S, Marcos, "Central and Peripheral Visual Quality and Accommodation with Multifocal Contact Lenses" talk O045, 17th International Myopia Conference, Tokyo, 2019.
20. L. Lundström, "Peripheral optical error and myopia" invited talk, XI All-Russia Ophthalmology Forum "ROOF", Moscow, 2018.
21. L. Lundström, "Peripheral Vision: Optical and Neural Factors" invited talk IMA5, XXIII Biennial Meeting of the International Society for Eye Research, Belfast, 2018.
22. D. Romashchenko, P. Papadogiannis, P. Unsbo, L. Lundström, "Image quality dynamics over the retina: can there be a link to myopia" talk, 9th VPO, Athens, 2018.
23. P. Papadogiannis, D. Romashchenko, P. Unsbo, L. Lundström, "Effect of the sign of defocus on peripheral vision with and without chromatic and monochromatic aberrations" talk, 9th VPO, Athens, 2018.
24. L. Lundström, A.P. Venkataraman, R. Rosén, M. van der Mooren, "Effect of average peripheral optical errors in agerelated macular degeneration" talk, 9th VPO, Athens, 2018.
25. P. Papadogiannis, D. Romashchenko, P. Unsbo, L. Lundström, "Influence of optical defocus on peripheral vision with and without aberrations", Annual meeting of ARVO, Honolulu, 2018.
26. D. Romashchenko, P. Papadogiannis, P. Unsbo, L. Lundström, "Image quality dynamics over the retina: can there be a link to myopia?", Annual meeting of ARVO, Honolulu, 2018.
27. D. Romashchenko, P. Papadogiannis, L. Lundström, P. Unsbo, "Comparison of wavefront sensing and photorefraction to measure microfluctuations in accommodation" poster P074, 16th International Myopia Conference, Birmingham, 2017.
28. P. Papadogiannis, D. Romashchenko, P. Unsbo, L. Lundström, "Effect of chromatic aberration on detecting the sign of defocus in the periphery" talk O012, 16th International Myopia Conference, Birmingham, 2017.
29. L. Lundström, A.P. Venkataraman, P. Papadogiannis, D. Romashchenko, S. Winter, P. Unsbo, "Peripheral contrast sensitivity function with and without chromatic aberrations" talk O014, 16th International Myopia Conference, Birmingham, 2017.
30. P. Lewis, A.P. Venkataraman, L. Lundström, "Enhancing peripheral vision in subjects with central field loss" talk, Vision 2017 12th international conference by ISLRR, The Hague, 2017.
31. M. van der Mooren, R. Rosén, L. Franssen, L. Lundström, P.A. Piers, "Prediction of contrast sensitivity in the presence of glare" poster 4223, Annual meeting of ARVO, Baltimore, 2017.
32. L. Lundström, A.P. Venkataraman, P. Lewis, P. Unsbo, "Peripheral CSF: effect of drift and central scotoma" talk, 8th VPO, Antwerp, 2016.

33. R. Rosén, L. Lundström, “Peripheral optical errors: analyzing and interpreting population data” talk, 8th VPO, Antwerp, 2016.
34. L. Lundström, A.P. Venkataraman, P.R. Lewis, P. Unsbo, “Spatiotemporal contrast sensitivity in the 10° visual field” talk 4750, Annual meeting of ARVO, Seattle, 2016.
35. A.P. Venkataraman, P.R. Lewis, L. Lundström, “Optical correction and stimulus motion to improve vision in eccentric preferred retinal locus” poster 5175, Annual meeting of ARVO, Seattle, 2016.
36. S. Winter, R. Sabesan, P.N. Tiruveedhula, C. Privitera, L. Lundstrom, A. Roorda, “Objective measurements of transverse chromatic aberration across the visual field of the human eye” talk 1730, Annual meeting of ARVO, Denver, 2015.
37. M. van der Mooren, R.F. Steinert, F. Tyson, R. Rosen, L. Lundstrom, P.A. Piers, “Understanding visual complaints of two intraocular lens explant cases” poster 1076, Annual meeting of ARVO, Denver, 2015.
38. M. van der Mooren, R. Rosén, P.A. Piers, L. Lundström, “Effect of retinal stray light on visual function” talk FP-4308, ESCRS, London, 2014.
39. L. Lundström, A.P. Venkataraman, S. Winter, P. Unsbo, “Preferred grating orientation in the peripheral field: a case study of high-contrast resolution” talk, 7th EMVPO (1st VPO), Wroclaw, 2014.
40. S. Winter, M. T. Fathi, A. P. Venkataraman, A. Seidemann, L. Lundström, P. Unsbo, “Effect of horizontally induced transverse chromatic aberration on foveal and peripheral visual acuity” talk, 7th EMVPO (1st VPO), Wroclaw, 2014.
41. A.P. Venkataraman, S. Winter, P. Unsbo, L. Lundström, “The lateral extent of blur stimulus affects blur adaptation” talk, 7th EMVPO (1st VPO), Wroclaw, 2014.
42. R. Rosén, M. van der Mooren, P. Piers, L. Lundström, “Impact of low amounts of scattering on visual function” talk, 7th EMVPO (1st VPO), Wroclaw, 2014.
43. S. Winter, L. Lundström, M.T. Fathi, A.P. Venkataraman, A. Seidemann, P. Unsbo, “Horizontally induced transverse chromatic aberration reduces peripheral acuity” poster 2115, Annual meeting of ARVO, Orlando, 2014.
44. A.P. Venkataraman, L. Lundström, S. Winter, P. Unsbo, “Small and Large Field Blur Adaptation: Foveal and Peripheral Contrast Sensitivity Changes” poster 769, Annual meeting of ARVO, Orlando, 2014.
45. L. Lundström, R. Rosén, M. van der Mooren, P. Unsbo, P.A. Piers, “Low Amounts of Scattering Reduce Central as well as Peripheral Contrast Sensitivity” poster 764, Annual meeting of ARVO, Orlando, 2014.
46. R. Rosén, L. Lundström, A.P. Venkataraman, S. Winter, P. Unsbo, “Quick measurements of contrast sensitivity in the peripheral visual field” poster 763, Annual meeting of ARVO, Orlando, 2014.
47. L. Lundström, R. Rosén, S. Winter, A.P. Venkataraman, P. Unsbo, “Peripheral vision evaluation with adaptive optics” poster, Optics & Photonics in Sweden, Uppsala, 2013.
48. R. Rosén, L. Lundström, K. Baskaran, J. Gustafsson, P. Unsbo, “How important are optical errors in peripheral resolution” poster, European Conference on Low Vision, Oxford, 2013.
49. D. Atchison, R. Rosén, L. Lundström, P. Unsbo, “We have misunderstood the 1971 peripheral refraction study of Hoogerheide et al.” poster 67, 14th International Myopia Conference, Asilomar, 2013.
50. R. Rosén, L. Lundström, S. Winter, A.P. Venkataraman, P. Unsbo, “Peripheral Contrast Sensitivity Function with Adaptive Optics” talk, 6th EMVPO, Dublin, 2012.
51. R. Rosén, L. Lundström, P. Unsbo, “Adaptive Optics for Peripheral Vision” poster 3587, Annual meeting of ARVO, Fort Lauderdale, 2012.
52. R. Rosén, L. Lundström, A. Abdul-Rasool, N. Ogmaia, C. Schwarz, P. Artal, P. Unsbo, “Insensitivity to Hyperopic Defocus in Peripheral Vision due to Optical Aberrations for Myopes” poster, Engineering the Eye III, Benasque, 2011

53. L. Lundström, R. Rosén, B. Jaeken, A. Lindskoog Petterson, P. Artal, P. Unsbo, “Influence of commercial soft multifocal contact lenses on peripheral refraction and aberrations” talk 4373, Annual meeting of ARVO, Fort Lauderdale, 2011.
54. R. Rosén, L. Lundström, A. Abdul-Rasool, N. Ogmaia, C. Schwarz, P. Artal, P. Unsbo, “Sign-dependent sensitivity to defocus in peripheral vision for myopes and emmetropes” talk 4371, Annual meeting of ARVO, Fort Lauderdale, 2011.
55. B. Jaeken, L. Lundström, P. Artal, “Peripheral aberrations measured with high angular resolution in a population of myopes and emmetropes” talk 4370, Annual meeting of ARVO, Fort Lauderdale, 2011.
56. J. Gustafsson, R. Rosén, M. Brodin, L. Lundström, P. Unsbo, “Improved refraction of patients with central visual field loss by the use of low contrast optotypes” poster 1899, Annual meeting of ARVO, Fort Lauderdale, 2011.
57. R. Rosén, L. Lundström, P. Unsbo, “Influence of optical defocus on peripheral vision” talk, 5th EMVPO, Stockholm, 2010.
58. L. Lundström, “Measuring refractive state and optical quality of the eye across the visual field” invited discussion session speaker, 5th EMVPO, Stockholm, 2010.
59. L. Lundström, R. Rosén, K. Baskaran, B. Jaeken, P. Artal, P. Unsbo, “Symmetries in peripheral ocular aberrations” poster 2010_3172_037, 5th EMVPO, Stockholm, 2010.
60. L. Lundström, “Correcting peripheral optics: impact on vision” invited talk, 13th International Myopia Conference, Tübingen, 2010.
61. L. Lundström, A. Mira-Agudelo, P. Artal, “Peripheral optical errors and their change with accommodation differ between emmetropic and myopic eyes” poster 71, 13th International Myopia Conference, Tübingen, 2010.
62. L. Lundström, J. Gustafsson, A. Mira-Agudelo, P. Unsbo, P. Artal, “Ocular off-axis aberrations and refraction: a population study” talk 6162, Annual meeting of ARVO, Fort Lauderdale, 2009.
63. B. Jaeken, L. Lundström, A. Mira-Agudelo, P. Artal, “Peripheral refraction and aberrations for different wavelengths: Off-axis chromatic aberration” poster 1556, Annual meeting of ARVO, Fort Lauderdale, 2009.
64. L. Lundström, A. Mira-Agudelo, P. Artal, “Measuring peripheral wavefront aberrations in emmetropes and myopes” talk, 4th EMVPO, Heraklion, 2008.
65. Mira-Agudelo, L. Lundström, P. Artal, “Temporal dynamics of the eye's aberration: monocular versus binocular vision” talk, 4th EMVPO, Heraklion, 2008.
66. Lindskoog Pettersson, L. Lundström, P. Unsbo, C. Jarkö, A. Alvin, R. Brautaset, “Aberration controll with contact lenses” poster 214, EVER, Portoroz, 2007.
67. L. Lundström, N. Gorceix, S. Manzanera, P.M. Prieto, D.B. Ayala, J. Gustafsson, P. Unsbo, P. Artal, “Effect of aberration correction on visual acuity in the periphery” talk 4003, Annual meeting of ARVO, Fort Lauderdale, 2007.
68. J. Gustafsson, L. Lundström, P. Unsbo, “Visual evaluation of resolution acuity with eccentric refractive correction” poster 3552, Annual meeting of ARVO, Fort Lauderdale, 2007.
69. L. Lundström, P. Unsbo, “Transformation of Zernike coefficients: scaled, translated, and rotated wavefronts with circular and elliptical pupils” poster 7, 3rd EMVPO London, 2006.
70. L. Lundström, “Perifer syn – Utvärdering av refraktiv korrektion vid makula degeneration” talk, Medicinteknik-dagarna, Uppsala, 2006.
71. J. Gustafsson, L. Lundström, P. Unsbo, “Eccentric correction improves the visual function in subjects with large central visual field loss”, VISION 2005, 8th International Conference on Low Vision, London, 4-7 April, 2005.
72. P. Unsbo, L. Lundström, J. Gustafsson, “Finding a spectacle correction in Keratoconus using a Hartmann-Shack sensor:a case study”, poster 2849, Annual meeting of ARVO, Ft Lauderdale, 2004.

73. L. Lundström, J. Gustafsson, P. Unsbo, “Assessment of objective and subjective eccentric refraction”, poster 2757, Annual meeting of ARVO, Ft Lauderdale, 2004.
74. J. Gustafsson, L. Lundström, P. Unsbo, “Eccentric correction in subjects with large central visual field loss” talk, 2nd EMVPO Granada, 2004.
75. L. Lundström, P. Unsbo, J. Gustafsson, “Measuring peripheral wavefront aberrations in subjects with large central visual field loss” talk 5314-40, Photonics West, San Jose, 2004.
76. P. Unsbo, L. K. Franzén, J. Gustafsson, “Increased Dynamic Range of a Hartmann-Shack Sensor by B-Spline Extrapolation: Measurement of Large Aberrations in the Human Eye” poster 2021, Annual meeting of ARVO, Ft Lauderdale, 2002.

Invited lectures:

1. L. Lundström, “Visual optics at KTH: Focus on the Periphery” Division of Eye and Vision Research seminar, KI, 2024.
2. L. Lundström, “Mechanisms of optical interventions for myopia control” Kongsberg Vision Meeting, 2023.
3. L. Lundström, “Focus on the Periphery: optical and neural factors” Biophotonics for Eye Research summer school - Jaca, 2023.
4. L. Lundström, “Optisk myopikontroll – hur fungerar det?” Nordiska Myopikontroll-förbundet, Stockholm, 2023.
5. L. Lundström, “Myopia and the peripheral optics of the eye” Dansk Oftalmologisk Selskab, Kolding, 2023.
6. L. Lundström, “Förbättrad perifer syn vid centralt synfältsbortfall” SCOP annual meeting, Nässjö, 2022.
7. L. Lundström, “Focus on the periphery” OBERON Summer Conference, Cambridge, 2022.
8. L. Lundström, “Myopia and the peripheral optics of the eye” Nordic Pediatric Ophthalmology Group 20th meeting, Stockholm, 2022.
9. L. Lundström, “Chromatic aberrations of the peripheral human eye” in OSA’s Vision Technical Group virtual weekly speaker series “Chromatic aberrations in Vision”, June 26, 2020.
10. L. Lundström, “En ny sorts optik” Synskadades Riksförbund Medlemsforum 2019 (Annual meeting for the Swedish association of the visually impaired).
11. L. Lundström, “Visual optics: Focus on the Periphery” 14th International Young Scientist conference “Developments in Optics and Communications” Riga, April 12 - 13, 2018.
12. L. Lundström, “Visual optics: Focus on the Periphery” Optopub, Stockholm, 2017.
13. L. Lundström, “Ögats synfel – är det fler som är närsynta idag?” the Royal Swedish Academy of Sciences inspiration seminar, Västerås, 2016.
14. L. Lundström, “Med periferin i fokus” AlbaNova open seminar, Stockholm, 2015.
15. L. Lundström, “Peripheral optics of the human eye” Optics & Photonics in Sweden, Stockholm, 2015.
16. Lindskoog Pettersson, M. Wahlberg, L. Lundström, “Kommersiella kontaktlinser, aberrationer och accommodation”, Kontaktlinskongressen, Stockholm, 2012.
17. L. Lundström, “Peripheral optics and vision” APHYS day, Stockholm, 2010.
18. L. Lundström, T. Pansell, “Vår syn – med aberrationer i focus” Kontaktlinskongressen, Stockholm, 2010.
19. L. Lundström, “Visual optics” ADOPT dagen, Stockholm, 2009.
20. L. Lundström, “Varför blir vi mer närsynta?” AlbaNova universitetscentrum Öppet Hus, Stockholm, 2009.
21. L. Lundström, “Fysiologisk optik” Optikdagen, Stockholm, 2006.