

PERSONALIA

Full name: Pieter Hendrik Turdus Beelen.
 Date of birth: 5-5-1973 (Kampen, The Netherlands).
 Address: Matematiktorvet 303B, 2800 Kgs. Lyngby, Denmark.
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SCIENTIFIC FOCUS

My main areas of interest are:
 1) Towers of Algebraic Curves in positive characteristic
 2) Construction and Decoding of Algebraic Codes
 3) Algorithms and computational aspects of algebra

RESEARCH POSITIONS AND EDUCATION

2016–2018 Visiting professor IIT Bombay, Mumbai, India.
 Sep 2014– Professor in Applied Algebra at [Technical University of Denmark](#) (DTU)
 2007–2014 Associate professor in Algebraic Coding at [Technical University of Denmark](#) (DTU)
 2004–2007 Assistant professor in Algebraic Coding at [Technical University of Denmark](#) (DTU)
 2003–2004 Postdoc at [Universität Essen](#), Germany
 2001–2003 Postdoc at [Technical University of Eindhoven](#) (TU/E), The Netherlands
 1997–2001 Ph.D. in Mathematics at TU/E.
 1991–1997 Student of mathematics at [Utrecht University](#). Graduated cum laude.

KEY STATISTICS

Associate editor for journal: IEEE Tr. IT,
 Network: Member of the Nordic Number theory Network.
 COST: Management Committee for Denmark in COST Action IC1104.
 Peer-reviewed publications: 29 (journal publications) and 17 (conference publications).
 Citation count: 398 H-Index: 12 (Google Scholar).
 Citation count: 115 H-Index: 6 (MathSciNet).
 Coauthors: 23 Cited by: 122 authors (MathSciNet).
 Invited Talks: 45. Conference/workshop presentations: 31.
 Reviewer for journals: IEEE Tr. IT, Moscow Math. J., Acta Arithm., J. Number. Th.,
 Fin. Fields and Appl., Des. Cod. and Crypt., J. Symbol. Comp., ao.
 Reviewer for conferences: WCC, AAEECC, ISIT, IMACC, YACC, ao.

MANAGEMENT EXPERIENCE AND SCIENTIFIC COMMITTEES

01-12-2015– [Associate editor for IEEE Trans. on Inf. Th.](#)
 2013–2015 [Head of the section for mathematics at DTU Compute.](#)
 2013–2014 [Vice-head of the Ph.D. school at DTU Compute.](#)
 2012 [Head of the Ph.D. school at DTU Mathematics.](#)
 2011 –2015 [Program committee of WCC 2011, 3rd Castle meeting, YACC 2012, IMACC'13.](#)
 2011 –2015 [Member of 7 Ph.D. committees: 3 internal, 2 Ulm U. \(Germany\), 1 INRIA \(France\), 1 NTU \(Singapore\).](#)
 2010 [Substitute head of the discrete mathematics research group at DTU Mathematics.](#)
 2008 [Participated in the course “MUS-leader” \(a course on holding job-appraisal interviews\), DTU.](#)
 2007 [Participated in the course “Coaching of peers”, DTU.](#)
 2006 [Participated in the course “Supervision of Ph.D. students”, DTU.](#)

EXTERNAL FUNDING

- 2016 Host of DFF-FNU postdoc (Grant No. 6108-00362), 2016-2018, PI Mrinmoy Datta.
- 2014 Part of DFF-FNU project "How secret is a secret?" (Grant No. 4002-00367), PI Olav Geil (AAU)
- 2010 Significant contributor to DNRF Danish-Chinese center application AGINCC (Grant No.1106113053), 2011-2014, PI Tom Høholdt.
- 2009 Otto Mønsted application for guest professor S.R. Ghorpade, IIT Bombay, India.
- 2007 Significant contribution to DFF-FNU application "Algebraic Coding Theory" 2008-2011 (J.nr. 09-063870), PI Tom Høholdt.
- 2004 Contributor to DFF-FNU application "Mathematical Coding Theory" 2005-2008 (J.nr. 21-04-0365), PI Tom Høholdt.

TEACHING AND SUPERVISION

- 2016 Advisor Bachelor's thesis [Locally Decodable Codes](#), DTU.
- 2015 Coadvisor Bachelor's thesis [Curves and Codes](#), KU.
- 2015 Advisor Master's thesis [Coding Theory and Projective Geometry](#), DTU.
- 2014 Advisor Bachelor's thesis [Galois Theory and Applications](#), DTU.
- 2014 Advisor Master's thesis [Factorisation of Hard Numbers](#), DTU.
- 2013 Lecturer in summer school on [Mathematics of Information-Theoretic Cryptography](#), Leiden, The Netherlands.
- 2012 Advisor Master's thesis [Computational Aspects of Modular Curves](#), DTU.
- 2012 – 2015 Supervisor of Ph.D. student [Nhut Nguyen](#).
- 2011 – 2014 Supervisor of Ph.D. student [Fernando Pinero](#).
- 2011 Lecturer in ACAGM summer school on [computational mathematics \(S3CM\)](#), KU Leuven, Belgium.
- 2011 Lecturer in [ELGA summer school](#), Buenos Aires, Argentina.
- 2010 – 2013 Supervisor of Ph.D. student [Johan S.R. Nielsen](#).
- 2009 Advisor Master's thesis [List-decoding of error-correcting codes](#), DTU.
- 2009 Lecturer at summer school on [computational mathematics \(S3CM\)](#), Soria, Spain.
- 2008 Coadvisor Master's thesis ["Pairing-based Cryptography"](#), DTU.
- 2007 – 2010 Supervisor of Ph.D. student [Kristian Brander](#).
- 2004 – present Teacher at DTU on introductory mathematics, discrete mathematics, algebra, coding theory, ao. Nomination teacher of the year: 2012, 2015.

SELECTED INVITED TALKS 2012 – PRESENT

- 2016 (planned) Keynote talk for workshop [Mathematics of Information-Theoretic Cryptography](#), NUS and NTU, Singapore.
- 2016 (planned) Invited talk, SIAM Conference on Discrete Mathematics, [Georgia State Univ., Atlanta, USA](#).
- 2015 Fast decoding of algebraic codes, WITMSE 2015, [Copenhagen Business School, June 24 – 26](#)
- 2015 Curves with many rational points: The latest on Ihara's constant, research visit, [IIT Bombay, India, Jan. 21](#).
- 2014 Good towers over non-prime fields, Workshop on Function Field Arithmetic, [Sirince, Turkey, June 9 – 13](#).
- 2013 Obtaining Towers using Drinfeld Modules, Workshop Algebraic Curves over Finite Fields, [RICAM, Linz, Austria, Nov. 11 – 15](#).
- 2013 Modular towers obtained using Drinfeld modules, Workshop AGCT-14, [CIRM, Luminy, France, June 3 – 7](#).
- 2012 Affine Grassmann codes, research visit, [INRIA, Paris, France, Jan. 22 – 27](#).