Eivind Eriksen

Curriculum Vitae

BI Norwegian Business School
Department of Economics
N-0442 Oslo, Norway
+47 4740 8701
eivind.eriksen@bi.no
www.dr-eriksen.no/
Date of birth 01 May, 1970

Education

1995–2000 **Dr. Scient. (Ph.D.)**, *Department of Mathematics*, University of Oslo.
Thesis: *Graded D-modules on monomial curves*, Supervisor: Professor O.A. Laudal

1993–1994 **Cand. Scient. (M.Sc.)**, *Department of Mathematics*, University of Oslo.
Konneksjoner og monodromi for en klasse moduler over simple kurvesingulariteter, Supervisor: Professor O.A. Laudal

1990–1992 **Cand. Mag. (B.A.)**, *Faculty of Sciences*, University of Oslo.
Courses in: Mathematics, Physics, Computing

Research Experience

2019- **Professor**, *BI Norwegian Business School.*
Professor in Mathematics, Department of Economics

2014 **Guest Researcher**, *Laboratoire de Mathématiques J.A. Dieudonné*, Université de Nice.
Host: Professor Ph. Maisonobe

2010-2019 **Associate Professor**, *BI Norwegian Business School.*
Associate Professor in Mathematics, Department of Economics

2005-2010 **Associate Professor**, *OsloMet – Oslo Metropolitan University.*
Associate Professor in Mathematics, Faculty of Engineering

2004-2005 **Associate Professor**, *University of South-Eastern Norway.*
Associate Professor in Mathematics, Faculty of Engineering

2003-2004 **Guest Researcher**, *Institut Mittag-Leffler.*
Noncommutative Geometry Year 2003-04

2003-2004 **NRC Postdoctoral Fellow**, *University of Oslo.*
Project: Length categories and algebraic D-modules

2001-2003 **Marie Curie Postdoctoral Fellow**, *University of Warwick.*
Project: D-modules on singular curves and surfaces, Supervisor: Dr. C.R. Hajarnavis

1999 **Guest Researcher**, *Institut de Mathématiques*, Université Toulouse III Paul Sabatier.
Host: Professor Carlos Simpson

1997 **Guest Researcher**, *Laboratoire de Mathématiques J.A. Dieudonné*, Université de Nice.
Host: Professor Ph. Maisonobe

1995-2000 **Research Fellow**, *University of Oslo.*
Full-time fellowship for doctoral research, with 25% teaching load

1993-1994 **Graduate Student**, *University of Oslo.*
Research for Master thesis

Teaching Experience

2019- **Professor**, *BI Norwegian Business School.*
Lecturer in Mathematics/Statistics, Responsible for courses at bachelor/master/doctoral level

2010-2019 **Associate Professor**, *BI Norwegian Business School.*
Lecturer in Mathematics/Statistics, Responsible for courses at bachelor/master/doctoral level

2005-2010 **Associate Professor**, *OsloMet – Oslo Metropolitan University.*
Lecturer in Mathematics/Physics

2004-2005 **Associate Professor**, *University of South-Eastern Norway*.
Lecturer in Mathematics/Statistics/Mathematics for economists

2000-2002 **Teaching Assistant**, *University of Warwick*.
Combinatorics, Galois theory, Presentations of groups, Rings and modules, Mathematical Excursions

1995-2000 **Research Fellow**, *University of Oslo*.
Lecturer Linear algebra, Graduate seminar (Commutative algebra II, Algebraic D-modules), teaching assistant

1992-1994 **Teaching Assistant**, *University of Oslo*.
Calculus, Vector analysis, Linear algebra, Finite mathematics

Awards and Fellowships

2003-2004 **NRC Postdoctoral Fellowship**, *University of Oslo*.
Awarded by the NRC (Norwegian Research Council), 1-year full-time research fellowship

2003-2004 **Mittag-Leffler Postdoctoral Fellowship**, *Institut Mittag-Leffler*.
Awarded by the Institute Mittag-Leffler, grant to cover travel and living expenses

2001-2003 **ESF Travel Grant**, *University of Oslo*.
Awarded by the ESF (European Science Foundation), travel grant for 1 month of research

2001-2003 **Marie Curie Fellowship**, *University of Warwick*.
Awarded by the European Commission, 2-year full-time research fellowship

1999 **Travel Grant**, *Institut de Mathématiques*, Université Toulouse III Paul Sabatier.
Awarded by the University of Oslo, travel grant for 6 months of research

1997 **NRC Travel Grant**, *Laboratoire de Mathématiques J.A. Dieudonné*, Université de Nice.
Awarded by the NRC (Norwegian Research Council), travel grant for 6 months of research

1995-2000 **Research Fellowship**, *University of Oslo*.
Awarded by the University of Oslo, 4-year doctoral research fellowship with 25% teaching load

1993,1994 **Student Grants**, *University of Oslo*.
Awarded by the University of Oslo, NOK 6.000 per year

Research Interests

General **Algebras and their representations, (noncommutative) algebraic geometry, singularities**.

Deformations **Noncommutative deformation theory, geometry of simple modules, noncommutative affine schemes, moduli problems**.

Differential structures **Rings of differential operators, D-modules, connections on modules over isolated singularities, finite length categories and iterated extensions**.

Applications **Mathematical economics, applied linear algebra, computational (non)commutative algebra, elliptic curves over finite fields and application to cryptography**.

Scientific Papers

[1] E. Eriksen, *Graded D-modules on monomial curves*, Ph.D. thesis, University of Oslo, June 2000.

[2] ———, *Differential operators on monomial curves*, J. Algebra **264** (2003), no. 1, 186–198.

[3] ———, *An introduction to noncommutative deformations of modules*, Noncommutative algebra and geometry, Lect. Notes Pure Appl. Math., vol. 243, Chapman & Hall/CRC, Boca Raton, FL, 2006, pp. 90–125.

[4] ———, *Connections on modules over quasi-homogeneous plane curves*, Comm. Algebra **36** (2008), no. 8, 3032–3041.

[5] ———, *An example of noncommutative deformations*, J. Gen. Lie Theory Appl. **2** (2008), no. 3, 152–156.

[6] ———, *Computing noncommutative global deformations of D-modules*, Generalized Lie theory in mathematics, physics and beyond, Springer, Berlin, 2009, pp. 109–117.

[7] ———, *Computing noncommutative deformations of presheaves and sheaves of modules*, Canad. J. Math. **62** (2010), no. 3, 520–542.

[8] ———, *The generalized Burnside theorem in noncommutative deformation theory*, J. Gen. Lie Theory Appl. **5** (2011), Art. ID G110109, 5.

[9] _____, *Computing noncommutative deformations*, Algebra, geometry and mathematical physics, Springer Proc. Math. Stat., vol. 85, Springer, Heidelberg, 2014, pp. 285–290.

[10] _____, *Coherent rings of differential operators*, ArXiv e-prints **1003.5151** (2018).

[11] _____, *Graded Holonomic D-modules on Monomial Curves*, ArXiv e-prints **1803.04367** (2018).

[12] _____, *Iterated Extensions and Uniserial Length Categories*, ArXiv e-prints **1804.03405** (2018).

[13] E. Eriksen and T. S. Gustaven, *Computing obstructions for existence of connections on modules*, J. Symbolic Comput. **42** (2007), no. 3, 313–323.

[14] _____, *Connections on modules over singularities of finite CM representation type*, J. Pure Appl. Algebra **212** (2008), no. 7, 1561–1574.

[15] _____, *Connections on modules over singularities of finite and tame CM representation type*, Generalized Lie theory in mathematics, physics and beyond, Springer, Berlin, 2009, pp. 99–108.

[16] _____, *Lie-Rinehart cohomology and integrable connections on modules of rank one*, J. Algebra **322** (2009), no. 12, 4283–4294.

[17] _____, *Equivariant Lie-Rinehart cohomology*, Proc. Est. Acad. Sci. **59** (2010), no. 4, 294–300.

[18] E. Eriksen, O. A. Laudal, and A. Siqveland, *Noncommutative deformation theory*, Monographs and Research Notes in Mathematics, CRC Press, Boca Raton, FL, 2017.

[19] E. Eriksen and A. Siqveland, *Geometry of noncommutative algebras*, Algebra, geometry and mathematical physics, Banach Center Publ., vol. 93, Polish Acad. Sci. Inst. Math., Warsaw, 2011, pp. 69–82.

[20] _____, *On the Generalized Burnside Theorem*, ArXiv e-prints **1702.07645** (2017).

Textbooks and Teaching Material

[1] E. Eriksen, *Lineær algebra og vektorrom*, `http://www.dr-eriksen.no/teaching/Reading/kompendium.pdf`, 60pp., 2005.

[2] _____, *Linear systems and Gaussian elimination*, `http://www.dr-eriksen.no/teaching/GRA6035/Reading/LSGE.pdf`, 34pp., 2011.

[3] _____, *Matriser og kvadratiske former*, `http://www.dr-eriksen.no/teaching/ELE3719/Reading/mkf.pdf`, 22pp., 2012.

[4] _____, *Digital arbeidsbok i ELE 3719 Matematikk*, `http://www.dr-eriksen.no/teaching/ELE3719/Reading/arbeidsbok.pdf`, 139pp., 2015.

[5] _____, *Matematikk for økonomi og finans*, Cappelen Damm Akademisk, 2016.

[6] _____, *Differential equations*, `http://www.dr-eriksen.no/teaching/GRA6035/Reading/ode.pdf`, 50pp., 2017.

[7] _____, *Digital workbook for GRA6035 Mathematics*, `http://www.dr-eriksen.no/teaching/GRA6035/Reading/workbook.pdf`, 165pp., 2017.

[8] _____, *Matematikk for økonomi og finans. Oppgaver og løsningsforslag*, Cappelen Damm Akademisk, 2017.

[9] E. Eriksen and H. Fausk, *Mattenøkkelen*, Gyldendal Norsk Forlag, 2014.

[10] E. Eriksen and T.S. Gustavsen, *GRA6035 Mathematics*, `http://www.dr-eriksen.no/teaching/GRA6035/Reading/lnotes.pdf`, 271pp., 2010.

[11] E. Eriksen and H. Ø. Kittang, *Oppgavebank for matematikk forkurs*, Collection of exercises and solutions in algebra, precalculus and calculus, 2008.

Other information

Referee	Referee for Mathematica Scandinavica, Le Matematiche, Beiträge zur Algebra und Geometrie, J. Amer. Math. Society, Reviewer for Math. Reviews, Zentralblatt Math.
Courses	Introduksjonskurs i høgskolepedagogikk, Handelshøyskolen BI, 2010-11
Languages	Norwegian (native), english (fluent), french (functional)
Computer skills	Linux/Window, programming (C/python), computer algebra systems (Singular, Maple, Mathematica, Matlab), typesetting (LaTeX), web publishing (html/css, php)