CURRICULUM MICHEL VAN DEN BERGH

Personal data

Birthdate: 25-7-60¹
Spouse: Gerda Bust

- Children: Bertold (9-8-90) and Sarah (3-3-99).

EMPLOYMENT

- 1-9-82 to 31-7-87, Researcher at the FWO².
- 1-9-85 to 31-12-85, Instructor at the Massachusetts. Institute of Technology (MIT), Cambridge, Massachusetts.
- 15-8-87 to 1-7-88, C.L.E. Moore Instructor at the MIT.
- 1-10-88 to 31-12-88, Assistant UIA³.
- 1-1-89 to 31-12-90, Senior researcher at the FWO.
- $-\,$ 1-1-91 to 30-9-91, Assistant UIA.
- 1-10-91 to 30-9-92, Visiting position at the Institut des Hautes Etudes Scientifiques (IHES), Paris.
- 1-10-92 to 1-10-95, Professor at the Institut Louis Pasteur, Strasbourg (tenured position).
- 1-10-93 to -, Director of research at the FWO ("onderzoeksleider"). Based at the University of Hasselt.
- 1-10-94 to -, part time appointment at the "Free University of Brussels".
- 15-1-95 to 31-5-95, Visiting Associate Professor at MIT.
- 1-1-98 to 23-7-98, Visiting Professor at MIT.
- 1-2-00 to 30-4-00, Visiting "Key Senior Scientist" at the Mathematical Sciences Research Institute (MSRI) te Berkeley (USA).
- 22-12-03 to 18-6-04, Visiting position at the Mittag Leffler Institute in Stockholm.
- 15-01-2013 to 24-05-2013, MSRI, Organizer special program on "Non commutative algebraic geometry and representation theory".

Scientific carreer

- 10-7-79 to 7-7-82, Under graduate degree at the UIA (greatest distinction)
- 22-3-85, PhD in Mathematics, UIA
- 17-5-90, "Hoger Aggregaat⁴", UIA

SCIENTIFIC DISTINCTIONS

- $-\,$ 20-12-87, Laureat of the Belgian Academy of Sciences
- 1994, Invited speaker at the International Congres of Mathematicians (section talk).
- 7-6-97, Five-yearly "Alumni Prize" in mathematics.
- $-\,$ 23-6-2003, "Francqui Prize" (interdisciplinary prize by the Belgian Francqui Foundation).

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¹All dates are in the day-month-year format

 $^{^2\}mathrm{The}$ FWO is the Belgian equivalent of for example the CNRS in France or the NSF in the USA

³UIA is the main university in Antwerp

⁴equivalent of "Habilitation"

- 4-2020 ERC Advanced grant SCHEMES.
- 2021, "Francqui chair" at the Université Libre de Bruxelles.
- 2022, Plenary speaker at the International Congres of Mathematicians.

Organization of conferences

I was/am co-organizor of the following conferences.

- 14-2-2000 to 25-2-2000, MSRI, Interactions between algebraic geometry and non-commutative algebra.
- 14-4-2002 to 20-04-2002, OberWolfach, Interactions between algebraic geometry and non-commutative algebra.
- 12-1-2004 to 16-1-2004, Mittag-Leffler Institute, Non-commutative algebraic geometry.
- 9-8-04 to 27-08-04, International Centre for Theoretical Physics, Advanced summer school and workshop on non-commutative algebraic geometry.
- 22-10-2004 to 24-10-2004, Brussels, Francqui colloquium "Homological geometry".
- 7-5-2006 to 13-5-2006, OberWolfach, Interactions between algebraic geometry and non-commutative algebra.
- 18-9-2006 to 22-9-2006, Shanghai, Workshop on non-commutative algebraic geometry.
- 9-5-2010 to 15-5-2010, Ober Wolfach, Interactions between algebraic geometry and non-commutative algebra.
- 12-09-2011 to 16-09-2011, Shanghai, Noncommutative Algebraic Geometry.
- Spring 2013 (semester long program), MSRI, Noncommutative algebraic geometry and representation theory.
- 18-5-2014 to 24-5-2014, OberWolfach, Interactions between algebraic geometry and non-commutative algebra.
- 19-9-2016 to 24-9-2016 Antwerp, Non-commutative, derived and homotopical methods in geometry.
- $-\,$ 5-12-2016 to 9-12-2016 Oxford, Clay Workshop: Generalized Geometry and Noncommutative Algebra.
- 27-05-2018 to 2-06-2018, OberWolfach, Interactions between algebraic geometry and non-commutative algebra.
- 1-05-2022 to 7-05-2022, OberWolfach, Interactions between algebraic geometry and non-commutative algebra.
- Spring 2024 (semeter long program), MSRI, Noncommutative Algebraic Geometry.

I was/am in the Scientific Advisory Panel for

18-12-2006 to 22-12-2006, Newton Institute Cambridge, Trends in Noncommutative Geometry.

SCIENTIFIC RESPONSABILITIES

- Editor "Advances in Mathematics"
- Editor "Journal of Noncommutative Geometry"
- Formerly: Editor "Journal of Algebra and Number Theory"
- Formerly: Editor "Algebras and Representation Theory"
- Formerly: Editor "Applied Categorical Structures"

- Formerly: Editor "Journal of Algebra."
- Formerly: Editor "Bulletin of the Belgian Mathematical Society".

Longer Stays abroad

- 15-06-06 to 15-07-06, Invited professor at Paris 7.
- 1-10-2010 to 31-10-2010, Bonn, 1 month scientific visit to the Max Planck Institute.
- 9-11-2010 to 28-12-2010, Paris, 11/2 months scientific visit to the IHES.
- 11-07-2011 to 2-08-2011, Kyoto, 3 weeks visit to RIMS.
- 24-06-2012 to 7-07-2012, OberWolfach, Research in Pairs.
- 31-08-2104 to 20-09-2014, Trieste, 3 weeks scientific visit to SISSA, cooperation with Alice Rizzardo.
- 1-1-2016 to 31-1-2016, Bonn, 1 month scientific visit to the Max Planck Institute.
- 1-10-2018 to 12-10-2018, Trento, Research in Pairs.
- 1-10-2019 to 31-1-2020, Bonn, 4 months scientific visit to the Max Planck Institute.

Phd-students

- Bert Sevenhant (1-10-01): Wild quivers: on a conjecture of Kac and the Ringel-Hall algebra.
- Martine Van Gastel (4-1-02): The local and global structure of non-commutative projective planes.
- Wendy Lowen (18-3-05): Deformation theory and Hochschild cohomology of abelian categories.
- Koen de Naeghel (27-2-06): Ideals of three dimensional Artin-Schelter regular algebras.
- Adam-Christiaan Van Roosmalen (15-5-2008): On the classification of hereditary categories.
- Louis de Thanhoffer de Volcey (29-05-2015): Non-commutative projective geometry and Calabi-Yau algebras.
- Theo Raedschelders (12-05-2017): Manin's universal Hopf algebras and highest weight categories.
- Dennis Presotto (14-06-2017): Noncommutative del Pezzo surfaces and related topics.
- Pieter Belmans (joint with Wendy Lowen, 9-06-2017): Connections between commutative and noncommutative algebraic geometry.
- Timothy De Deyn.
- Anya Nordskova.

RECENT RESEARCH GRANTS

- 1-1-2016 to 31-12-2019, FWO-grant G0D8616N "Hochschild cohomology and deformation theory of triangulated categories" €132000 (joint with Wendy Lowen).
- 1-1-2021 to 31-12-2025, ERC Advanced grant: "Schobers stability and mutations (SCHEMES)" €1015047.50 (already mentioned above).

PUBLICATIONS

Monographs.

- (1) L. Le Bruyn, M. Van den Bergh, and F. Van Oystaeyen, *Graded orders*, Birkhäuser Boston Inc., Boston, MA, pp. vi+208, 1988.
- (2) I. Reiten and M. Van den Bergh, Two-dimensional tame and maximal orders of finite representation type, Mem. Amer. Math. Soc. 80 (1989), viii+72.
- (3) I. M. Musson and M. Van den Bergh, Invariants under tori of rings of differential operators and related topics, Mem. Amer. Math. Soc. 136 (1998), viii+85.
- (4) M. Van den Bergh, *Blowing up of non-commutative smooth surfaces*, Mem. Amer. Math. Soc. **154** (2001), x+140.

Articles.

- (5) M. Van den Bergh, A duality theorem for Hopf algebras, Methods in ring theory (Antwerp, 1983), NATO Adv. Sci. Inst. Ser. C Math. Phys. Sci., vol. 129, Reidel, Dordrecht, pp. 517–522, 1984.
- (6) S. Caenepeel, M. Van den Bergh, and F. Van Oystaeyen, Generalized crossed products applied to maximal orders, Brauer groups and related exact sequences, J. Pure Appl. Algebra 33 (1984), 123–149.
- (7) M. Van den Bergh and J. Van Geel, A duality theorem for orders in central simple algebras over function fields, J. Pure Appl. Algebra 31 (1984), 227– 239.
- (8) M. Van den Bergh and J. Van Geel, Algebraic elements in division algebras over function fields of curves, Israel J. Math. **52** (1985), 33–45.
- (9) M. Van den Bergh, On a theorem of Cohen and Montgomery, Proc. Amer. Math. Soc. **94** (1985), 562–564.
- (10) M. Van den Bergh, *Graded Dedekind rings*, J. Pure Appl. Algebra **35** (1985), 105–115.
- (11) M. Van den Bergh, A note on graded K-theory, Comm. Algebra $\mathbf{14}$ (1986), 1561-1564.
- (12) L. Le Bruyn and M. Van den Bergh, An explicit description of $T_{3,2}$, Ring theory (Antwerp, 1985), Lecture Notes in Math., vol. 1197, Springer, Berlin, pp. 109–113, 1986.
- (13) L. Le Bruyn, M. Van den Bergh, and F. Van Oystaeyen, *Proj of generic matrices and trace rings*, Comm. Algebra **14** (1986), 1687–1706.
- (14) M. Van den Bergh, The algebraic index of a division algebra, Ring theory (Antwerp, 1985), Lecture Notes in Math., vol. 1197, Springer, Berlin, pp. 190–206, 1986.
- (15) M. Van den Bergh, Regular rings of dimension three, Séminaire d'algèbre Paul Dubreil et Marie-Paule Malliavin (Paris, 1986), Lecture Notes in Math., vol. 1296, Springer, Berlin, pp. 228–234, 1987.
- (16) M. Van den Bergh, A note on graded Brauer groups, Bull. Soc. Math. Belg. Sér. B **39** (1987), 177–179.
- (17) M. Van den Bergh, *Linearisations of binary and ternary forms*, J. Algebra **109** (1987), 172–183.
- (18) L. Le Bruyn and M. Van den Bergh, *The ramification divisor of regular tame orders*. *I*, Comm. Algebra **15** (1987), 1815–1840.

- (19) M. Van den Bergh, Division algebras over function fields of varieties, Academiae Analecta 49 (1987), 127–135.
- (20) M. Van den Bergh, *The Brauer-Severi scheme of the trace ring of generic matrices*, Perspectives in ring theory (Antwerp, 1987), NATO Adv. Sci. Inst. Ser. C Math. Phys. Sci., vol. 233, Kluwer Acad. Publ., Dordrecht, pp. 333–338, 1988.
- (21) L. Le Bruyn and M. Van den Bergh, Regularity of trace rings of generic matrices, J. Algebra 117 (1988), 19–29.
- (22) M. Awami, M. Van den Bergh, and F. Van Oystaeyen, *Note on derivations of graded rings and classification of differential polynomial rings*, Bull. Soc. Math. Belg. Sér. A **40** (1988), 175–183.
- (23) M. Van den Bergh, Group rings over Dedekind rings, Israel J. Math. 61 (1988), 295–300.
- (24) M. Van den Bergh, Algebraic splitting fields of division algebras, Ring theory 1989 (Ramat Gan and Jerusalem, 1988/1989), Israel Math. Conf. Proc., vol. 1, Weizmann, Jerusalem, pp. 381–388, 1989.
- (25) M. Van den Bergh, The center of the generic division algebra, J. Algebra 127 (1989), 106–126.
- (26) C. Năstăsescu, M. Van den Bergh, and F. Van Oystaeyen, Separable functors applied to graded rings, J. Algebra 123 (1989), 397–413.
- (27) M. Van den Bergh, Trace rings of generic matrices are Cohen-Macaulay, J. Amer. Math. Soc. 2 (1989), 775–799.
- (28) M. J. Asensio, M. Van den Bergh, and F. Van Oystaeyen, A new algebraic approach to microlocalization of filtered rings, Trans. Amer. Math. Soc. 316 (1989), 537–553.
- (29) M. Van den Bergh and F. Van Oystaeyen, *Lifting maximal orders*, Comm. Algebra **17** (1989), 341–349.
- (30) M. Artin, J. Tate, and M. Van den Bergh, Some algebras associated to automorphisms of elliptic curves, The Grothendieck Festschrift, Vol. I, Progr. Math., vol. 86, Birkhäuser Boston, Boston, MA, pp. 33–85, 1990.
- (31) M. Artin and M. Van den Bergh, Twisted homogeneous coordinate rings, J. Algebra 133 (1990), 249–271.
- (32) H. S. Li, M. Van den Bergh, and F. Van Oystaeyen, Note on the K_0 of rings with Zariskian filtration, K-Theory 3 (1990), 603–606.
- (33) H. S. Li, M. Van den Bergh, and F. Van Oystaeyen, Global dimension and regularity of Rees rings for non-Zariskian filtrations, Comm. Algebra 18 (1990), 3195–3208.
- (34) M. Van den Bergh, Differential operators on semi-invariants for tori and weighted projective spaces, Topics in invariant theory (Paris, 1989/1990), Lecture Notes in Math., vol. 1478, Springer, Berlin, pp. 255–272, 1991.
- (35) M. Artin, J. Tate, and M. Van den Bergh, Modules over regular algebras of dimension 3, Invent. Math. 106 (1991), 335–388.
- (36) M. Van den Bergh, Cohen-Macaulayness of modules of covariants, Invent. Math. 106 (1991), 389–409.
- (37) L. Le Bruyn and M. Van den Bergh, Algebraic properties of linear cellular automata, Linear Algebra Appl. 157 (1991), 217–234.
- (38) M. Van den Bergh, Cohen-Macaulayness of modules of invariants for SL₂, J. Algebra 142 (1991), 273–284.

- (39) M. Van den Bergh, Explicit rational forms for the Poincaré series of the trace rings of generic matrices, Israel J. Math. **73** (1991), 17–31.
- (40) C. Apostolopoulos, M. Van den Bergh, and F. Van Oystaeyen, On Schur rings of group rings of finite groups, Comm. Algebra 20 (1992), 2139–2152.
- (41) A. Schofield and M. Van den Bergh, *The index of a Brauer class on a Brauer-Severi variety*, Trans. Amer. Math. Soc. **333** (1992), 729–739.
- (42) A. Jensen, S. Jøndrup, and M. Van den Bergh, Artinian quotient rings of filtered rings, J. Algebra 161 (1993), 230–236.
- (43) L. Le Bruyn and M. Van den Bergh, On quantum spaces of Lie algebras, Proc. Amer. Math. Soc. 119 (1993), 407–414.
- (44) M. Van den Bergh, *Cohen-Macaulayness of semi-invariants for tori*, Trans. Amer. Math. Soc. **336** (1993), 557–580.
- (45) M. Van den Bergh, Noncommutative homology of some three-dimensional quantum spaces, Proceedings of Conference on Algebraic Geometry and Ring Theory in honor of Michael Artin, Part III (Antwerp, 1992), vol. 8, pp. 213–230, 1994.
- (46) M. Van den Bergh, A converse to Stanley's conjecture for SL₂, Proc. Amer. Math. Soc. 121 (1994), 47–51.
- (47) A. Schofield and M. Van den Bergh, *Division algebra coproducts of index* n, Trans. Amer. Math. Soc. **341** (1994), 505–517.
- (48) M. Van den Bergh, Modules of covariants, Proceedings of the International Congress of Mathematicians, Vol. 1, 2 (Zürich, 1994), Birkhäuser, Basel, pp. 352–362, 1995.
- (49) J. Tate and M. Van den Bergh, *Homological properties of Sklyanin algebras*, Invent. Math. **124** (1996), 619–647.
- (50) L. Le Bruyn, S. P. Smith, and M. Van den Bergh, Central extensions of three-dimensional Artin-Schelter regular algebras, Math. Z. 222 (1996), 171–212.
- (51) M. Van den Bergh, A translation principle for the four-dimensional Sklyanin algebras, J. Algebra **184** (1996), 435–490.
- (52) M. Van den Bergh, Some rings of differential operators for SL₂-invariants are simple, J. Pure Appl. Algebra **107** (1996), 309–335.
- (53) J. Alev, A. Ooms, and M. Van den Bergh, A class of counterexamples to the Gelfand-Kirillov conjecture, Trans. Amer. Math. Soc. 348 (1996), 1709–1716.
- (54) M. Van den Bergh, Division algebras on \mathbb{P}^2 of odd index, ramified along a smooth elliptic curve are cyclic, Algèbre non commutative, groupes quantiques et invariants (Reims, 1995), Sémin. Congr., vol. 2, Soc. Math. France, Paris, pp. 43–53, 1997.
- (55) M. Van den Bergh and M. Van Gastel, Graded modules of Gelfand-Kirillov dimension one over three-dimensional Artin-Schelter regular algebras, J. Algebra 196 (1997), 251–282.
- (56) M. Van den Bergh, Existence theorems for dualizing complexes over non-commutative graded and filtered rings, J. Algebra 195 (1997), 662–679.
- (57) K. E. Smith and M. Van den Bergh, Simplicity of rings of differential operators in prime characteristic, Proc. London Math. Soc. (3) 75 (1997), 32–62.

- (58) M. Van den Bergh, A relation between Hochschild homology and cohomology for Gorenstein rings, Proc. Amer. Math. Soc. **126** (1998), 1345–1348.
- (59) T. Gateva-Ivanova and M. Van den Bergh, Semigroups of I-type, J. Algebra **206** (1998), 97–112.
- (60) K. Bauwens and M. Van den Bergh, Normalizing extensions of the two-Veronese of a three-dimensional Artin-Schelter regular algebra on two generators, J. Algebra **205** (1998), 368–390.
- (61) B. Sevenhant and M. Van den Bergh, On the number of absolutely indecomposable representations of a quiver, J. Algebra **221** (1999), 29–49.
- (62) B. Sevenhant and M. Van den Bergh, On the double of the Hall algebra of a quiver, J. Algebra 221 (1999), 135–160.
- (63) M. Van den Bergh, Local cohomology of modules of covariants, Adv. Math. 144 (1999), 161–220.
- (64) K. Ajitabh and M. Van den Bergh, Presentation of critical modules of GKdimension 2 over elliptic algebras, Proc. Amer. Math. Soc. 127 (1999), 1633–1639.
- (65) J. Alev, A. I. Ooms, and M. Van den Bergh, *The Gelfand-Kirillov conjecture* for Lie algebras of dimension at most eight, J. Algebra **227** (2000), 549–581.
- (66) M. Van den Bergh, Abstract blowing down, Proc. Amer. Math. Soc. 128 (2000), 375–381.
- (67) A. Schofield and M. Van den Bergh, Semi-invariants of quivers for arbitrary dimension vectors, Indag. Math. (N.S.) 12 (2001), 125–138.
- (68) B. Sevenhant and M. Van den Bergh, A relation between a conjecture of Kac and the structure of the Hall algebra, J. Pure Appl. Algebra 160 (2001), 319–332.
- (69) I. Reiten and M. Van den Bergh, *Grothendieck groups and tilting objects*, Algebr. Represent. Theory 4 (2001), 1–23.
- (70) J. T. Stafford and M. Van den Bergh, *Noncommutative curves and non-commutative surfaces*, Bull. Amer. Math. Soc. (N.S.) **38** (2001), 171–216.
- (71) I. Reiten and M. Van den Bergh, Noetherian hereditary abelian categories satisfying Serre duality, J. Amer. Math. Soc. 15 (2002), 295–366.
- (72) M. Van den Bergh, Erratum to: "A relation between Hochschild homology and cohomology for Gorenstein rings" [Proc. Amer. Math. Soc. 126 (1998), no. 5, 1345–1348; MR 99m:16013], Proc. Amer. Math. Soc. 130 (2002), 2809–2810.
- (73) M. Van den Bergh and M. Van Gastel, On the structure of non-commutative regular local rings of dimension two, Comm. Algebra **30** (2002), 4575–4588.
- (74) M. Van den Bergh, *Non-commutative crepant resolutions*, The Legacy of Niels Hendrik Abel, Springer, pp. 749–770, 2002.
- (75) A. Bondal and M. Van den Bergh, Generators and representability of functors in commutative and noncommutative geometry, Moscow Mathematical Journal 3 (2003), 1–36.
- (76) W. Crawley-Boevey and M. Van den Bergh, Absolutely indecomposable representations and Kac-Moody Lie algebras, Invent. Math. 155 (2004), 537–559
- (77) M. Van den Bergh, *Three-dimensional flops and noncommutative rings*, Duke Math. J. **122** (2004), 423–455.

- (78) K. de Naeghel and M. van den Bergh, Ideal classes of three-dimensional Sklyanin algebras, J. Algebra 276 (2004), 515–551.
- (79) M. Van den Bergh, *A remark on a theorem by Deligne*, Proc. Amer. Math. Soc. **132** (2004), 2857–2858.
- (80) K. De Naeghel and M. Van den Bergh, *Ideal classes of three dimensional Artin-Schelter regular algebras*, J. Algebra **283** (2005), 399–429.
- (81) M. Van den Bergh, On the $\mathbb{Z}D_{\infty}$ category, Proceedings of the 37th Symposium on Ring Theory and Representation Theory, Symp. Ring Theory Represent Theory Organ. Comm., Osaka, pp. 103–112, 2005.
- (82) W. Lowen and M. Van den Bergh, *Hochschild cohomology of abelian cate-gories and ringed spaces*, Adv. Math. **198** (2005), 172–221.
- (83) W. Lowen and M. Van den Bergh, *Deformation theory of abelian categories*, Trans. Amer. Math. Soc. **358** (2006), 5441–5483.
- (84) L. Hille and M. Van den Bergh, Fourier-Mukai transforms, Handbook of tiltingtheory, London Mathematical Society Lecture Note Series, vol. 332, Cambridge University Press, pp. 147–173, 2007.
- (85) K. De Naeghel and M. Van den Bergh, On incidence between strata of the Hilbert scheme of points on P², Math. Z. 255 (2007), 897–922.
- (86) M. Van den Bergh, On global deformation quantization in the algebraic case, Journal of Algebra **315** (2007), 326–395.
- (87) M. Van den Bergh, *Double Poisson algebras*, Trans. Amer. Math. Soc. **360** (2008), 5711–5769.
- (88) J. T. Stafford and M. Van den Bergh, *Noncommutative resolutions and rational singularities*, Michigan Math. J. **57** (2008), 659–674.
- (89) M. Van den Bergh, Non-commutative quasi-Hamiltonian spaces, Poisson geometry in mathematics and physics, Contemp. Math., vol. 450, Amer. Math. Soc., Providence, RI, pp. 273–299, 2008.
- (90) M. Van den Bergh, The Kontsevich weight of a wheel with spokes pointing outward, Algebr. Represent. Theory 12 (2009), 443–479.
- (91) D. Calaque and M. Van den Bergh, Global formality at the G_{∞} -level, Mosc. Math. J. **10** (2010), 31–64, 271.
- (92) D. Calaque and M. Van den Bergh, Hochschild cohomology and Atiyah classes, Adv. Math. 224 (2010), 1839–1889.
- (93) R. Buchweitz, G. J. Leuschke, and M. Van den Bergh, *Non-commutative desingularization of determinantal varieties I*, Invent. Math. **182** (2010), 47–115.
- (94) D. Calaque, C. A. Rossi, and M. van den Bergh, *Hochschild (co)homology* for Lie algebroids, Int. Math. Res. Not. IMRN (2010), 4098–4136.
- (95) A. I. Ooms and M. Van den Bergh, A degree inequality for Lie algebras with a regular Poisson semi-center, J. Algebra **323** (2010), 305–322.
- (96) W. Lowen and M. van den Bergh, A Hochschild cohomology comparison theorem for prestacks, Trans. Amer. Math. Soc. **363** (2011), 969–986.
- (97) M. Van den Bergh, *Noncommutative quadrics*, Int. Math. Res. Not. IMRN (2011), 3983–4026.
- (98) B. Keller, D. Murfet, and M. Van den Bergh, On two examples by Iyama and Yoshino, Compos. Math. 147 (2011), 591–612.
- (99) M. Van den Bergh, Non-commutative \mathbb{P}^1 -bundles over commutative schemes, Trans. Amer. Math. Soc. **364** (2012), 6279–6313.

- (100) D. Calaque, C. A. Rossi, and M. Van den Bergh, *Căldăraru's conjecture and Tsygan's formality*, Ann. of Math. (2) **176** (2012), 865–923.
- (101) M. Van den Bergh, Notes on formal deformations of abelian categories, Derived categories in algebraic geometry, EMS Ser. Congr. Rep., Eur. Math. Soc., Zürich, pp. 319–344, 2012.
- (102) S. P. Smith and M. Van den Bergh, *Non-commutative quadric surfaces*, Journal of Noncommutative Geometry 7 (2013), 817–856.
- (103) L. de Thanhoffer de Völcsey and M. Van den Bergh, *Some new examples of nondegenerate quiver potentials*, Int. Math. Res. Not. IMRN (2013), 4672–4686.
- (104) W. Lowen and M. Van den Bergh, On compact generation of deformed schemes, Advances in Mathematics **244** (2013), 441–464.
- (105) B. Kriegk and M. Van den Bergh, Representations of non-commutative quantum groups, Proc. Lond. Math. Soc. (3) 110 (2015), 57–82.
- (106) M. Van den Bergh, Calabi-Yau algebras and superpotentials, Selecta Math. (N.S.) **21** (2015), 555–603.
- (107) R. Buchweitz, G. J. Leuschke, and M. Van den Bergh, On the derived category of Grassmannians in arbitrary characteristic, Compos. Math. 151 (2015), 1242–1264.
- (108) M. Van den Bergh, On Involutivity of p-Support, Int. Math. Res. Not. IMRN (2015), 6295–6304.
- (109) G. Tabuada and M. Van den Bergh, *Noncommutative motives of Azumaya algebras*, J. Inst. Math. Jussieu **14** (2015), 379–403.
- (110) A. Rizzardo and M. Van den Bergh, Scalar extensions of derived categories and non-Fourier-Mukai functors, Adv. Math. 281 (2015), 1100–1144.
- (111) L. de Thanhoffer de Völcsey and M. Van den Bergh, Explicit models for some stable categories of maximal Cohen-Macaulay modules, Math. Res. Lett. 23 (2016), 1507–1526.
- (112) R. Buchweitz, G. J. Leuschke, and M. Van den Bergh, *Non-commutative desingularization of determinantal varieties, II: arbitrary minors*, Int. Math. Res. Not. IMRN (2016), 2748–2812.
- (113) G. Tabuada and M. Van den Bergh, *Noncommutative motives of separable algebras*, Adv. Math. **303** (2016), 1122–1161.
- (114) D. Presotto and M. Van den Bergh, Noncommutative versions of some classical birational transformations, J. Noncommut. Geom. 10 (2016), 221–244.
- (115) Š. Špenko and M. Van den Bergh, Non-commutative resolutions of quotient singularities for reductive groups, Invent. Math. 210 (2017), 3–67.
- (116) Š. Špenko and M. Van den Bergh, Comparing the commutative and non-commutative resolutions for determinantal varieties of skew symmetric and symmetric matrices, Adv. Math. **317** (2017), 350–370.
- (117) T. Raedschelders and M. Van den Bergh, *The Manin Hopf algebra of a Koszul Artin–Schelter regular algebra is quasi-hereditary*, Adv. Math. **305** (2017), 601–660.
- (118) T. Raedschelders and M. Van den Bergh, The representation theory of non-commutative $\mathcal{O}\operatorname{GL}_2$, J. Noncommut. Geom. 11 (2017), 845–885.

- (119) L. de Thanhoffer de Völcsey and M. Van den Bergh, *Calabi-Yau deformations and negative cyclic homology*, J. Noncommut. Geom. **12** (2018), 1255–1291.
- (120) G. Tabuada and M. Van den Bergh, *The Gysin triangle via localization and* A¹-homotopy invariance, Trans. Amer. Math. Soc. **370** (2018), 421–446.
- (121) G. Tabuada and M. Van den Bergh, *Additive invariants of orbifolds*, Geom. Topol. **22** (2018), 3003–3048.
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