List of Publications of Yasuyuki Kawahigashi

- [1] Y. Kawahigashi, Centrally ergodic one-parameter automorphism groups on semifinite injective von Neumann algebras, *Math. Scand.* **64** (1989), 285–299.
- [2] Y. Kawahigashi, One-parameter automorphism groups of the hyperfinite type II₁ factor, J. Operator Theory **25** (1991), 37–59.
- [3] Y. Kawahigashi, One-parameter automorphism groups of the injective II_1 factor arising from the irrational rotation C^* -algebra, $Amer.\ J.\ Math.$ 112 (1990), 499–524.
- [4] Y. Kawahigashi, One-parameter automorphism groups of the injective II₁ factor with Connes spectrum zero, *Canad. J. Math.* **43** (1991), 108–118.
- [5] Y. Kawahigashi, C. E. Sutherland & M. Takesaki, The structure of the automorphism group of an injective factor and the cocycle conjugacy of discrete abelian group actions, *Acta Math.* 169 (1992), 105–130.
- [6] Y. Kawahigashi, M. Takesaki, Compact abelian group actions on injective factors, J. Funct. Anal. 105 (1992), 112–128.
- [7] Y. Kawahigashi, Cohomology of actions of discrete groups on factors of type II₁, *Pacific J. Math.* **149** (1991), 303–317.
- [8] Y. Kawahigashi, Automorphisms commuting with a conditional expectation onto a subfactor with finite index, J. Operator Theory 28 (1992), 127–145.
- [9] Y. Kawahigashi, Group actions on injective factors, in "Current Topics in Operator Algebras", World Scientific Publishing (1991), 2–12.
- [10] Y. Kawahigashi, On flatness of Ocneanu's connections on the Dynkin diagrams and classification of subfactors, J. Funct. Anal. 127 (1995), 63–107.
- [11] M. Izumi, Y. Kawahigashi, Classification of subfactors with the principal graph $D_n^{(1)}$, J. Funct. Anal. **112** (1993), 257–286.

- [12] Y. Kawahigashi, Exactly solvable orbifold models and subfactors, in "Functional Analysis and Related Topics", Lect. Notes in Math. 1540, Springer Verlag, (1992), 127–147.
- [13] D. E. Evans, Y. Kawahigashi, Orbifold subfactors from Hecke algebras, Commun. Math. Phys. 165 (1994), 445–484.
- [14] Y. Kawahigashi, Centrally trivial automorphisms and an analogue of Connes's $\chi(M)$ for subfactors, *Duke Math. J.* **71** (1993), 93–118.
- [15] D. E. Evans, Y. Kawahigashi, From subfactors to 3-dimensional topological quantum field theories and back a detailed account of Ocneanu's theory —, *Internat. J. Math.* 6 (1995), 537–558.
- [16] D. E. Evans, Y. Kawahigashi, Subfactors and conformal field theory, in "Quantum and non-commutative analysis", Kluwer Academic (1993), 341–369.
- [17] D. E. Evans, Y. Kawahigashi, The E_7 commuting squares produce D_{10} as principal graph, *Publ. RIMS Kyoto Univ.* **30** (1994), 151–166.
- [18] Y. Kawahigashi, Classification of paragroup actions on subfactors, *Publ. RIMS Kyoto Univ.* **31** (1995), 481–517.
- [19] Y. Kawahigashi, Paragroups and their actions on subfactors, in "Subfactors", World Scientific (1994), 64–84.
- [20] Y. Kawahigashi, Paragroups as quantized Galois groups of subfactors, Sugaku Exp. 9 (1996), 21–35.
- [21] D. E. Evans, Y. Kawahigashi, On Ocneanu's theory of symptotic inclusions for subfactors, topological quantum field theories and quantum doubles, *Internat. J. Math.* 6 (1995), 205–228.
- [22] Y. Kawahigashi, Orbifold subfactors, central sequences, and the relative Jones invariant κ , Internat. Math. Res. Notices **1995** (1995), 129–140.
- [23] Y. Kawahigashi, Classification of approximately inner automorphisms of subfactors, *Math. Ann.* **308** (1997), 425–438.
- [24] D. E. Evans, Y. Kawahigashi, "Quantum symmetries on operator algebras" (848 pages), Oxford University Press (1998).

- [25] D. E. Evans, Y. Kawahigashi, Orbifold subfactors from Hecke algebras II —Quantum doubles and braiding—, Commun. Math. Phys. 196 (1998), 331–361.
- [26] Y. Kawahigashi, Quantum doubles and orbifold subfactors, in "Operator Algebras and Quantum Field Theory", International Press (1997), 271– 283.
- [27] Y. Kawahigashi, Subfactors and paragroup theory, in "Operator Algebras and Operator Theory", Contemp. Math. 228 (1998), 179–188.
- [28] Y. Kawahigashi, Quantum Galois correspondence fos subfactors, *J. Funct. Anal.* **167** (1999), 498–520.
- [29] J. Böckenhauer, D. E. Evans, Y. Kawahigashi, On α -induction, chiral generators and modular invariants for subfactors, *Commun. Math. Phys.* **208** (1999), 429–487.
- [30] Y. Kawahigashi, R. Longo, M. Müger, Multi-interval subfactors and modularity of representations in conformal field theory, *Commun. Math. Phys.* 219 (2001), 631–669.
- [31] J. Böckenhauer, D. E. Evans, Y. Kawahigashi, Chiral structure of modular invariants for subfactors, Commun. Math. Phys. 210 (2000), 733– 784.
- [32] J. Böckenhauer, D. E. Evans, Y. Kawahigashi, Longo-Rehren subfactors arising from α -induction, *Publ. RIMS, Kyoto Univ.* **37** (2001), 1–35.
- [33] Y. Kawahigashi, Braiding and nets of factors on the circle, in "Operator Algebras and Applications", Adv. Stud. Pure Math. **38**, (2004), 219–228.
- [34] Y. Kawahigashi, Braiding and extensions of endomorphisms of subfactors, in "Mathematical Physics in Mathematics and Physics", R. Longo ed., The Fields Institute Communications 30, AMS Publications (2001), 261–269.
- [35] Y. Kawahigashi, Generalized Longo-Rehren subfactors and α -induction, Commun. Math. Phys. **226** (2002), 269–287.

- [36] Y. Kawahigashi, R. Longo, Classification of local conformal nets: Case c < 1, Ann. of Math. 160 (2004), 493–522.
- [37] Y. Kawahigashi, Conformal quantum field theory and subfactors, *Acta Math. Sin.* **19** (2003), 557–566.
- [38] Y. Kawahigashi, N. Sato, M. Wakui, (2+1)-dimensional topological quantum field theory from subfactors and Dehn surgery formula for 3-manifold invariants, *Adv. Math.* **195** (2005), 165–204.
- [39] Y. Kawahigashi, Classification of operator algebraic conformal field theories, in "Advances in Quantum Dynamics", Contemp. Math. 335 (2003) 183–193.
- [40] Y. Kawahigashi, R. Longo, Classification of two-dimensional local conformal nets with c < 1 and 2-cohomology vanishing for tensor categories, Commun. Math. Phys. **244** (2004), 63–97.
- [41] Y. Kawahigashi, Subfactor theory and its applications operator algebras and quantum field theory —, in "Selected Papers on Differential Equations", Amer. Math. Soc. Transl. **215**, Amer. Math. Soc. (2005), 97–108.
- [42] Y. Kawahigashi, Topological quantum field theories and operator algebras, in "Quantum Field Theory and Noncommutative Geometry", Lect. Notes in Phys. 662, Springer Verlag, (2005), 241–253.
- [43] Y. Kawahigashi, Classification of operator algebraic conformal field theories in dimensions one and two, in "XIVth International Congress on Mathematical Physics", World Scientific (2005), 476–485.
- [44] Y. Kawahigashi, R. Longo, Noncommutative spectral invariants and black hole entropy, *Commun. Math. Phys.* **257** (2005), 193–225.
- [45] Y. Kawahigashi, R. Longo, Local conformal nets arising from framed vertex operator algebras, Adv. Math. 206 (2006), 729–751.
- [46] Y. Kawahigashi, R. Longo, U. Pennig, K.-H. Rehren, Classification of non-local chiral CFT with c < 1, Commun. Math. Phys. **271** (2007), 375–385.

- [47] Y. Kawahigashi, Conformal field theory and operator algebras, in "New Trends in Mathematical Physics", Springer (2009), 345–356.
- [48] S. Carpi, Y. Kawahigashi, R. Longo, Structure and classification of superconformal nets, *Ann. Henri Poincaré* **9** (2008), 1069–1121.
- [49] Y. Kawahigashi, Superconformal field theory and operator algebras, in "Noncommutativity and Singularities", Adv. Stud. Pure Math. 55 (2009), 69–81.
- [50] S. Carpi, R. Hillier, Y. Kawahigashi, R. Longo, Spectral triples and the super-Virasoro algebra, *Commun. Math. Phys.* **295** (2010), 71–97.
- [51] Y. Kawahigashi, From operator algebras to superconformal field theory, J. Math. Phys. **51** (2010), 015209.
- [52] S. Carpi, Y. Kawahigashi, R. Longo, On the Jones index values for conformal subnets, Lett. Math. Phys. 92 (2010), 99–108.
- [53] S. Carpi, Y. Kawahigashi, R. Longo, How to add a boundary condition, Commun. Math. Phys. 322 (2013), 149–166.
- [54] S. Carpi, R. Hillier, Y. Kawahigashi, R. Longo, F. Xu, N=2 superconformal nets, *Commun. Math. Phys.* **336** (2015), 1285–1328.
- [55] Y. Kawahigashi, N. Suthichitranont, Construction of holomorphic local conformal framed nets, *Internat. Math. Res. Notices* 2014 (2014), 2924– 2943.
- [56] Y. Kawahigashi, Y. Ogata, E. Størmer, Normal states of type III factors, Pacific J. Math. 267 (2014), 131–139.
- [57] M. Bischoff, Y. Kawahigashi, R. Longo, K.-H. Rehren, Phase boundaries in algebraic conformal QFT, Commun. Math. Phys. 342 (2016), 1–45.
- [58] M. Bischoff, Y. Kawahigashi, R. Longo, K.-H. Rehren, Tensor categories and endomorphisms of von Neumann algebras (with applications to Quantum Field Theory), SpringerBriefs in Mathematical Physics 3, 2015.

- [59] M. Bischoff, Y. Kawahigashi, R. Longo, Characterization of 2D rational local conformal nets and its boundary conditions: the maximal case, *Doc. Math.* 20 (2015), 1137–1184.
- [60] S. Carpi, Y. Kawahigashi, R. Longo, M. Weiner, From vertex operator algebras to conformal nets and back, Mem. Amer. Math. Soc. 254 (2018), no. 1213, vi+85 pp.
- [61] Y. Kawahigashi, Conformal field theory, tensor categories and operator algebras, J. Phys. A, 48 (2015), 303001.
- [62] Y. Kawahigashi, A remark on gapped domain walls between topological phases, Lett. Math. Phys. 105 (2015), 893–899.
- [63] Y. Kawahigashi, A relative tensor product of subfactors over a modular tensor category, *Lett. Math. Phys.* **107** (2017), 1963–1970.
- [64] Y. Kawahigashi, The relative Drinfeld commutant of a fusion category and α -induction, *Internat. Math. Res. Notices* **2019** (2019), 6304–6316.
- [65] Y. Kawahigashi, Conformal field theory, vertex operator algebras and operator algebras, Proceedings of the International Congress of Mathematicians, Vol. III, 2597–2616, World Scientific, Rio de Janeiro, 2018.
- [66] Y. Kawahigashi, A remark on matrix product operator algebras, anyons and subfactors, *Lett. Math. Phys.* **110** (2020), 1113–1122.
- [67] Y. Kawahigashi, Projector matrix product operators, anyons and higher relative commutants of subfactors, Math. Ann. 387 (2023), 2157–2172.
- [68] Y. Kawahigashi, Two-dimensional topological order and operator algebras, *Internat. J. Modern Phys. B* **35** (2021), 2130003 (16 pages).
- [69] Y. Kawahigashi, A characterization of a finite-dimensional commuting square producing a subfactor of finite depth, *Internat. Math. Res. Notices* **2023** (2023), 8419–8433.
- [70] Y. Kawahigashi, α -induction for bi-unitary connections, *Quantum Topol.* **15** (2024), 503–536.
- [71] D. E. Evans, Y. Kawahigashi, Subfactors and mathematical physics, Bull. Amer. Math. Soc. 60 (2023), 459–482.

- [72] V. Benedetti, H. Casini, Y. Kawahigashi, R. Longo, J. M. Magan, Modular invariance as completeness, *Phys. Rev. D* **110** (2024), 125004.
- [73] Y. Kawahigashi, Flatness of α -induced bi-unitary connections and commutativity of Frobenius algebras, arXiv:2408.05501.