

List of Papers

- [60] *Combinatorial construction of the absolute Galois group of the field of rational numbers* (with Shinichi Mochizuki and Shota Tsujimura), RIMS Preprint **1935** (December 2020).
- [59] *Explicit estimates in inter-universal Teichmüller theory* (with Shinichi Mochizuki, Ivan Fesenko, Arata Minamide, and Wojciech Porowski), RIMS Preprint **1933** (November 2020).
- [58] *On the outer automorphism groups of the absolute Galois groups of mixed-characteristic local fields* (with Yu Nishio), RIMS Preprint **1931** (November 2020).
- [57] The geometry of hyperbolic curvoids, to appear in *Publ. Res. Inst. Math. Sci.*
- [56] *On indigenous bundles in characteristic three*, RIMS Preprint **1918** (June 2020).
- [55] A note on the existence of Tango curves, to appear in *Kodai Math. J.*
- [54] *A note on Schwarzian derivatives and Sugiyama-Yasuda locally exact differentials*, RIMS Preprint **1914** (April 2020).
- [53] *Frobenius-affine structures and Tango curves*, RIMS Preprint **1913** (April 2020).
- [52] *Ramification of torsion points on a curve with superspecial reduction over an absolutely unramified base*, RIMS Preprint **1912** (February 2020).
- [51] *Pseudo-rigid p -torsion finite flat commutative group schemes*, RIMS Preprint **1911** (February 2020).
- [50] On the geometric subgroups of the étale fundamental groups of varieties over real closed fields (with Takahiro Murotani and Shota Tsujimura), to appear in *Math. Z.*
- [49] *A note on torsion points on ample divisors on abelian varieties*, RIMS Preprint **1909** (November 2019).
- [48] *Integrable connections III: Frobenius-descent data*, RIMS Preprint **1904** (July 2019).
- [47] *Integrable connections II: divided power stratifications*, RIMS Preprint **1903** (July 2019).
- [46] *Integrable connections I: two fundamental correspondences*, RIMS Preprint **1902** (July 2019).
- [45] The absolute anabelian geometry of quasi-tripods, to appear in *Kyoto J. Math.*
- [44] *Progress in anabelian geometry* (in Japanese) (February 2019).
- [43] A note on an anabelian open basis for a smooth variety, *Tohoku Math. J. (2)* **72** (2020), no. **4**, 537-550.
- [42] Homotopy sequences for varieties over curves, to appear in *Kobe J. Math.*
- [41] Reconstruction of profinite graphs from profinite groups of PIPSC-type, *Hokkaido Math. J.* **49** (2020), no. **3**, 399-430.
- [40] Hyperbolic ordinarity of hyperelliptic curves of lower genus in characteristic three, *Kyushu J. Math.* **73** (2019), no. **2**, 317-335.
- [39] Topics in the anabelian geometry of mixed-characteristic local fields, *Hiroshima Math. J.* **49** (2019), no. **3**, 323-398.
- [38] Frobenius-projective structures on curves in positive characteristic, *Publ. Res. Inst. Math. Sci.* **56** (2020), no. **2**, 401-430.
- [37] *Group-theoreticity of numerical invariants and distinguished subgroups of configuration space groups* (with Arata Minamide and Shinichi Mochizuki), RIMS Preprint **1870** (March 2017).
- [36] Introduction to mono-anabelian geometry, to appear in *Proceedings of the conference "Fundamental Groups in Arithmetic Geometry"*, Paris, France 2016.

- [35] On the supersingular divisors of nilpotent admissible indigenous bundles, *Kodai Math. J.* **42** (2019), no. **1**, 1-47.
- [34] The Grothendieck conjecture for the moduli spaces of hyperbolic curves of genus one (with Ryo Kinoshita and Chikara Nakayama), *Kodai Math. J.* **40** (2017), no. **3**, 625-637.
- [33] On the pro- p absolute anabelian geometry of proper hyperbolic curves, *J. Math. Sci. Univ. Tokyo* **25** (2018), no. **1**, 1-34.
- [32] Two categorical characterizations of local fields, *Hiroshima Math. J.* **48** (2018), no. **3**, 253-277.
- [31] Introduction to inter-universal Teichmüller theory, continued (in Japanese), *RIMS Kôkyûroku Bessatsu* **B72** (2018), 209-309.
- [30] Categorical characterization of strict morphisms of fs log schemes (with Chikara Nakayama), *Math. J. Okayama Univ.* **59** (2017), 1-19.
- [29] On ramified torsion points on a curve with stable reduction over an absolutely unramified base, *Osaka J. Math.* **54** (2017), no. **4**, 767-787.
- [28] Introduction to inter-universal Teichmüller theory (in Japanese), *RIMS Kôkyûroku Bessatsu* **B76** (2019), 79-183.
- [27] A note on dormant opers of rank $p - 1$ in characteristic p , *Nagoya Math. J.* **235** (2019), 115-126.
- [26] Mono-anabelian reconstruction of number fields, *RIMS Kôkyûroku Bessatsu* **B76** (2019), 1-77.
- [25] Nilpotent admissible indigenous bundles via Cartier operators in characteristic three, *Kodai Math. J.* **38** (2015), no. **3**, 690-731.
- [24] On the Grothendieck conjecture for affine hyperbolic curves over Kummer-faithful fields, *Kyushu J. Math.* **71** (2017), no. **1**, 1-29.
- [23] Finiteness of the moderate rational points of once-punctured elliptic curves, *Hokkaido Math. J.* **45** (2016), no. **2**, 271-291.
- [22] A pro- l version of the congruence subgroup problem for mapping class groups of genus one (with Yu Iijima), *J. Algebra* **520** (2019), 1-31.
- [21] The pro- l outer Galois actions associated to modular curves of prime power level (with Yu Iijima), *J. Théor. Nombres Bordeaux* **30** (2018), no. **3**, 781-799.
- [20] *Topics surrounding the combinatorial anabelian geometry of hyperbolic curves IV: Discreteness and sections* (with Shinichi Mochizuki), RIMS Preprint **1788** (September 2013).
- [19] On the kernels of the pro- l outer Galois representations associated to hyperbolic curves over number fields, *Osaka J. Math.* **52** (2015), no. **3**, 647-675.
- [18] On the field-theoreticity of homomorphisms between the multiplicative groups of number fields, *Publ. Res. Inst. Math. Sci.* **50** (2014), no. **2**, 269-285.
- [17] A note on the geometricity of open homomorphisms between the absolute Galois groups of p -adic local fields, *Kodai Math. J.* **36** (2013), no. **2**, 284-298.
- [16] The Grothendieck conjecture for hyperbolic polycurves of lower dimension, *J. Math. Sci. Univ. Tokyo* **21** (2014), no. **2**, 153-219.
- [15] *Topics surrounding the combinatorial anabelian geometry of hyperbolic curves III: Tripods and tempered fundamental groups* (with Shinichi Mochizuki), RIMS Preprint **1763** (November 2012).
- [14] *Topics surrounding the combinatorial anabelian geometry of hyperbolic curves II: Tripods and combinatorial cuspidalization* (with Shinichi Mochizuki), RIMS Preprint **1762** (November 2012).

- [13] Conditional results on the birational section conjecture over small number fields, *Automorphic Forms and Galois Representations*. vol. **2**, 187-230, London Math. Soc. Lecture Note Ser., **415**, Cambridge Univ. Press, Cambridge, 2014.
- [12] Corrigendum to “Tame-blind extension of morphisms of truncated Barsotti-Tate group schemes”, *J. Math. Sci. Univ. Tokyo* **19** (2012), no. **3**, 309-312.
- [11] Topics surrounding the combinatorial anabelian geometry of hyperbolic curves I: Inertia groups and profinite Dehn twists (with Shinichi Mochizuki), *Galois-Teichmüller Theory and Arithmetic Geometry*, 659-811, Adv. Stud. Pure Math., **63**, Math. Soc. Japan, Tokyo, 2012.
- [10] On a problem of Matsumoto and Tamagawa concerning monodromic fullness of hyperbolic curves: Genus zero case, *Tohoku Math. J. (2)* **65** (2013), no. **2**, 231-242.
- [9] On monodromically full points of configuration spaces of hyperbolic curves, *The Arithmetic of Fundamental Groups - PIA 2010*, 167-207, Contrib. Math. Comput. Sci., **2**, Springer, Heidelberg, 2012.
- [8] Existence of nongeometric pro- p Galois sections of hyperbolic curves, *Publ. Res. Inst. Math. Sci.* **46**, (2010) no. **4**, 829-848.
- [7] Galois-theoretic characterization of isomorphism classes of monodromically full hyperbolic curves of genus zero, *Nagoya Math. J.* **203** (2011), 47-100.
- [6] On the combinatorial anabelian geometry of nodally nondegenerate outer representations (with Shinichi Mochizuki), *Hiroshima Math. J.* **41** (2011), no. **3**, 275-342.
- [5] On the injectivity portion of combinatorial cuspidalization (in Japanese), *RIMS Kôkyûroku Bessatsu* **B19** (2010), 81-106.
- [4] Tame-blind extension of morphisms of truncated Barsotti-Tate group schemes, *J. Math. Sci. Univ. Tokyo* **16** (2009), no. **1**, 23-54.
- [3] Absolute anabelian cuspidalizations of configuration spaces of proper hyperbolic curves over finite fields, *Publ. Res. Inst. Math. Sci.* **45** (2009), no. **3**, 661-744.
- [2] On the fundamental groups of log configuration schemes, *Math. J. Okayama Univ.* **51** (2009), 1-26.
- [1] The exactness of the log homotopy sequence, *Hiroshima Math. J.* **39** (2009), no. **1**, 61-121.