

Guides on the IUT theory of Shinichi Mochizuki: reports, surveys, workshops materials, talks, lectures, videos

Published IUT papers

Inter-universal Teichmüller Theory, by Shinichi Mochizuki, Publications of RIMS, European Math Society Press, March 2021

Explicit estimates in inter-universal Teichmüller theory, by S. Mochizuki, I. Fesenko, Y. Hoshi, A. Minamide, W. Porowski, Kodai Math. J. 45(2022) 175-236

Reports

On the verification of inter-universal Teichmüller theory: a progress report (as of December 2013), by Shinichi Mochizuki

On the verification of inter-universal Teichmüller theory: a progress report (as of December 2014), by Shinichi Mochizuki

On pioneering mathematical research, the IUT papers by Shinichi Mochizuki, by Ivan Fesenko, 2021

Brief report on the current situation surrounding Inter-universal Teichmüller theory (IUT), August 2023, by Shinichi Mochizuki

About the study of IUT and new IUT prizes, August 2023, by Ivan Fesenko

Introductory and survey texts for mathematicians

Invitation to inter-universal Teichmüller theory (lecture note version), by Shinichi Mochizuki

A panoramic overview of inter-universal Teichmüller theory, Res. Inst. Math. Sci. (RIMS), Kyoto (2014), 301-345, by Shinichi Mochizuki

The mathematics of mutually alien copies: from gaussian integrals to inter-universal Teichmüller theory, Inter-universal Teichmüller Theory Summit 2016, RIMS Kokyuroku Bessatsu B84, Res. Inst. Math. Sci. (RIMS), Kyoto (2021) 23-192, by Shinichi Mochizuki

On the essential logical structure of inter-universal Teichmüller theory in terms of logical and " \wedge "/logical or " \vee " relations: Report on the occasion of the publication of the four main papers on inter-universal Teichmüller theory, by Shinichi Mochizuki

Arithmetic deformation theory via arithmetic fundamental groups and nonarchimedean theta functions, notes on the work of Shinichi Mochizuki, Europ. J. Math. (2015) 1:405-440, by Ivan Fesenko

Fukugen, in Inference: International Review of Science 2 no. 3 (2016), by Ivan Fesenko

Introduction to inter-universal Teichmüller theory (in Japanese), by Yuichiro Hoshi

Introduction to inter-universal Teichmüller theory, continued (in Japanese), by Yuichiro Hoshi

Introduction to mono-anabelian geometry, by Yuichiro Hoshi

A proof of abc conjecture, after Mochizuki, by Go Yamashita

Anabelian arithmetic geometry - a new geometry of forms and numbers: Inter-universal Teichmüller theory or “beyond Grothendieck’s vision”, by Benjamin Collas

Note on inter-universal Teichmüller theory, by Fucheng Tan, forthcoming

Workshops and seminars on IUT

December 2015 Oxford workshop on IUT, org. I.Fesenko, M. Kim, K. Kremnitzer

Beijing workshop on IUT, July 2015, org. Ch. P. Mok and F. Tan

Semester on anabelian geometry and inter-universal Teichmüller theory, 2016, Shanghai Jiao Tong Univ., org. F. Tan

July 2016 Kyoto workshop on IUT, org. I Fesenko, Sh. Mochizuki, Yu. Taguchi

RIMS-Lille online seminar on the IUT theory of Shinichi Mochizuki, 2020-2021

Special RIMS year "Expanding Horizons of Inter-universal Teichmüller Theory", April 2021-March 2022, including the following 4 workshops

Foundations and perspectives of anabelian geometry, June 28 - July 2 2021

Combinatorial anabelian geometry and related topics, July 6 - July 9 2021

Invitation to inter-universal Teichmüller theory, August 31 - September 3 2021

Inter-universal Teichmüller theory (IUT) summit, September 7 - September 10 2021

The first IUGC conference, Tokyo, April 2-5 2024

AMS Math Review (mathscinet) of the IUT papers

link to the review

Videos

[Videos of workshops an anabelian geometry and IUT](#)

Videos of the [2021 anabelian geometry and IUT RIMS workshops](#), [available on request](#)

[Animations of IUT](#)

General talks, books and videos about IUT

[Fumiharu Kato's talk at Simons Centre](#)

[Fumiharu Kato's public lecture on the abc conjecture and the inter-universal Teichmüller theory of Shinichi Mochizuki, with English subtitles](#)

["Mathematics that bridges universes. The shock of IUT theory", 300pp. book by Fumiharu Kato, Kadokawa, April 2019, ISBN 978-4044004170](#)

[The effective abc inequality and how it was applied to a new proof of FLT, by Ivan Fesenko, October 2023](#)

[IUT and modern number theory, talk at RIMS workshop on IUT Summit, September 2021, slides, by Ivan Fesenko](#)

[Video of a colloquium talk about IUT in Kyiv's Institute of Mathematics, by Ivan Fesenko](#)

[A colloquium talk about IUT for mathematicians, by Ivan Fesenko, slides](#)

More links are available from [this page](#) of Shinichi Mochizuki