Shinichi Mochizuki is a mathematician who is from Japan who has worked in and still studying geometry and number theory.

He is the leader of and the biggest contributor to anabelian geometry. His main contributions involve a solution of the Grothendieck conjecture in anabelian geometry about hyperbolic curves over number fields. He started and wrote related several novel areas such as absolute anabelian geometry, mono-anabelian geometry, combinatorial anabelian geometry. He initiated and wrote p-adic Teichmüller theory and Hodge–Arakelov theory. His most latest work includes the theory of anabelioids, frobenioids and the etale theta-function theory.

Shinichi Mochizuki is the writer of the famous inter-universal Teichmüller theory (IUT), also known as the arithmetic deformation theory or Mochizuki theory. This particular theory gives a new conceptual view of numbers by using groups of symmetries: absolute Galois groups and arithmetic fundamental groups. Applications of IUT in Mochizuki's papers are a solution to several difficult issues in number theory such as Szpiro conjecture, hyperbolic Vojta conjecture and the abc conjecture and its generalization over arbitrary number fields. Theinter-universal Teichmüller theory (IUT) may provide a fundamentally new development in number theory.

He found a method to prove Grothendieck conjecture on anabelian geometry in 1996 and was a guest as a speaker at the International Congress of Mathematicians in 1998. He introduced the Hodge–Arakelov theory in 1999. Between 2000 and 2008 he then introduced a couple of new theories including the theory of frobenioids, mono-anabelian geometry and the etale theta-function theory for line bundles over tempered covers of the Tate curve.

In August of the year 2012 he released 4 pre-prints which unfolded inter-universal Teichmüller theory and applied it to find a method to prove a couple of *holy grail* problems in mathematics, Diophantine geometry, which includes the strong Szpiro conjecture, hyperbolic Vojta conjecture and the abc conjecture over every number field. His works impact might be the greatest in number theory.

Apart from being globally famous for advancements in technology and its industrial achievements, Japan has a rich culture and a legacy in aesthetics that often gets overlooked in the media gaze generated by its superior quality electronics, cars, anime, manga, sushi and other offerings.

I am writing about Shinichi Mochizuki because he is one of the greatest contributors in mathematics who is still alive and still practicing in the field. His journey is inspiring because he is seen as a leader amongst his peers. Him being a Japanese mathematician also inspires me because it gives me the impression that I do not have to be European North American to be influential in the field of Mathematics.

While there were no experts on IUT in 2012, their number increased to a two-digital one in 2017. The papers are expected to be published in 2018 by Publications of RIMS.

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