Announcement on the occasion of the awarding of the IUT Innovator Prize

April 2024

Shinichi Mochizuki (on behalf of the five coauthors)

First of all, I would like to begin by expressing my deep gratitude, on behalf of the five coauthors of the paper to which the prize was awarded, to Fumiharu Kato (the Director of the IUGC) and Nobuo Kawakami for their exceptional zeal in supporting activities related to inter-universal Teichmüller theory.

The paper previously received attention in the mass media as a result of the alternative proof of Fermat's Last Theorem which follows as a consequence of the results proved in the paper. On the other hand, as I have pointed out previously on numerous occasions, from the point of view of experts, the true essence, or center of mass, of inter-universal Teichmüller theory lies not in any specific numerical consequence of the theory, but rather in the fact that it yields one answer to a very central issue of number theory --- namely, the theoretical elucidation of the relationship between addition and multiplication --- by means of anabelian geometry. When viewed from this vantage point, unlike previous results in anabelian geometry that were entirely unrelated to concrete numerical consequences, the essential significance of the paper may be understood as lying in the fact that it shows, for the first time, that

anabelian geometry has the power to yield concrete numerical results.

The paper arose as a result of collaboration between five coauthors whose fields of specialty exhibit a substantial degree of diversity. In particular, the circumstances which gave rise to the paper underscore just how important a role is played in supporting the development of inter-universal Teichmüller theory and related anabelian geometry by the research community constituted by the many researchers involved in this line of research. It is precisely for this reason that we have decided to pursue the goal of using the prize money to support the further development of inter-universal Teichmüller theory and related anabelian geometry by donating the prize money to RIMS, Kyoto University, to be used to this end.