The 4th Kyushu Joint Seminar

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Invitation to Inter-universal Teichmüller Theory

Kumamoto University

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Abstract

Inter-universal Teichmüller theory is a theory concerning the construction of canonical deformations of the "arithmetic holomorphic structure" of number fields. In the first two hour lecture, I will discuss various considerations related to the background that led to the development of the theory, such as the goal of applying the theory to diophantine geometry (e.g., the ABC Conjecture), as well as the analogy between the theory and classical complex Teichmüller theory. In the second two hour lecture, I will concentrate on more technical aspects of the theory, including the analogy with the classical functional equation of the theta function.

Both lectures are in Japanese, but English versions of the slides will be distributed.

About Kyushu Joint Seminar:

The idea could be traced back to many decades. Thanks to the Kyushu Shinkansen, now it becomes practically possible. We hope that the Q-semi, nick name for the KJS, would provide a common platform for these interested to act and play, with the aim to promote the mathematical activities in big Kyushu area.

The organizer committee consists of four, Takashi Ichikawa (ichikawa@ms.saga-u.ac.jp), Fumiharu Kato (kato@sci.kumamoto-u.ac.jp), Kunio Obitsu (obitsu@sci.kagoshima-u.ac.jp), and Lin Weng (weng@math.kyushu-u.ac.jp).

If you have good candidate for speaker, please feel free to contact us: It should not be bounded by our research fields. Currently, we would like to arrange the Q-semi 2-4 times a year in Kyushu area.