

# THE IWASAWA INVARIANTS OF $\mathbb{Z}_p^d$ -COVERS OF LINKS

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In this talk, we will define the Iwasawa invariants of links and give two asymptotic formulae for the first homology groups of  $\mathbb{Z}_p^d$ -covers of links in rational homology 3-spheres, which are generalizations of the Iwasawa type formulae proven by Hillman–Matei–Morishita and Kadokami–Mizusawa. We will also provide examples of these formulae. Moreover, when  $d = 2$ , considering the twisted Whitehead links, we will explain that Iwasawa  $\mu$ -invariants can be arbitrary non-negative integers. This is a joint work with Jun Ueki.

## REFERENCES

- [1] Sohei Tateno and Jun Ueki, *The Iwasawa invariants of  $\mathbb{Z}_p^d$ -covers of links*, in preparation.