

第34回

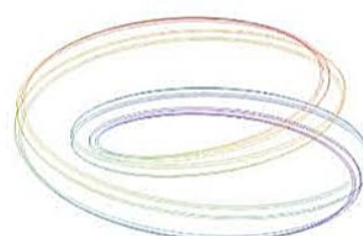
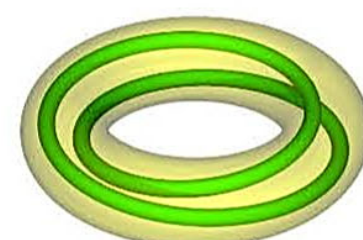
# Zoom 開催

## Steve Hurder氏

(University of Illinois  
at Chicago)

### *Cantor dynamics of renormalizable groups*

A group  $G$  is said to be finitely non-co-Hopfian, or renormalizable, if there exists a proper self-embedding of  $G$  into itself whose image has finite index. Such a proper self-embedding is called a renormalization for  $G$ . In this work, we assign a dynamical system to a renormalization of  $G$ . The discriminant invariant  $D$  of the associated Cantor dynamical system is a profinite group. The discriminant is a measure of the asymmetries of the dynamical system. If  $D$  is a finite group for some renormalization, we show that  $G/N$  is nilpotent, where  $N$  is the kernel of the action map. We also introduce the notion of a renormalizable Cantor action, and prove that the renormalization property of a Cantor action is an invariant of continuous orbit equivalence. Moreover, the discriminant invariant of a renormalizable Cantor action is an invariant of continuous orbit equivalence. The action associated to a renormalizable group is itself renormalizable.



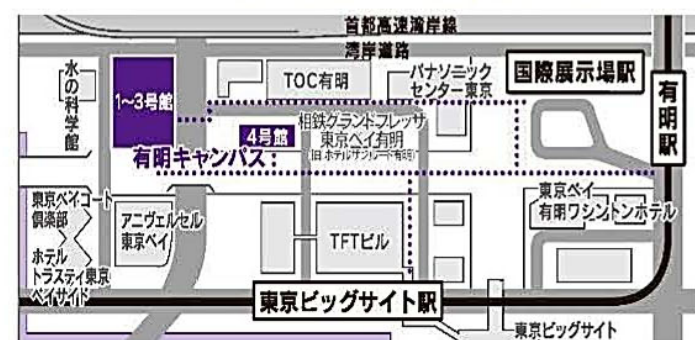
# 6月23日 (火) 9:00-10:00

【日本時間】

オンライン開催 (Zoom)

参加ご希望の方は、事前に [mcme@musashino-u.ac.jp](mailto:mcme@musashino-u.ac.jp) までご連絡ください。

りんかい線「国際展示場駅」徒歩7分



コーディネーター：坪井 俊（武蔵野大学工学部数理工学科 教授）

問い合わせ先：武蔵野大学数理工学センター

[https://www.musashino-u.ac.jp/research/laboratory/mathematical\\_engineering/](https://www.musashino-u.ac.jp/research/laboratory/mathematical_engineering/)

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