## 東北大学大学院情報科学研究科純粋・応用数学研究センター

## 情報数理談話会のお知らせ

日 時: 2019年12月20日金14:00より15:00まで

(会場にお茶を用意しております)

場 所: 東北大学大学院情報科学研究科棟 2 階大講義室

講演者: 伊東 桂司 氏 (東北大学大学院情報科学研究科)

題 目: Bases for matrix units for fiber-commutative coherent con-

figurations

(ファイバー可換なコヒアラント配置における行列単位基

底)

備 考: この情報数理談話会は課程博士予備審査会を兼ねています

[概 要] Adjacency algebras of commutative association schemes have two bases, which are the set of adjacency matrices and the set of primitive idempotents. Coherent configurations are known as a generalization of association schemes. However adjacency algebras of coherent configurations have one basis, which is the set of adjacency matrices, and primitive central idempotents which generalize the second basis for the commutative case do not span the adjacency algebra. In this talk, we introduce bases of matrix units for fiber-commutative coherent configurations as a generalization of the set of primitive idempotents. In addition, we generalize some of the theorems concerning primitive idempotents of commutative association schemes to bases of matrix units for fiber-commutative coherent configurations.

ホームページ: http://www.math.is.tohoku.ac.jp/research/colloquium.html