

東北大学大学院情報科学研究科
純粹・応用数学研究センター

情報数理談話会のお知らせ

日 時： 2018年12月7日(金) 15:00より16:00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： 久保田 匠 氏 (東北大学大学院情報科学研究科)

題 目： Distance-regular graphs and Godsil–McKay switching

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] The spectrum of the adjacency matrices of graphs is a very good graph invariant and it is not easy to find graphs with the same spectrum by touch. On the other hand, there certainly exist pairs of graphs with the same spectrum but not isomorphic to each other. In addition, it is known that a method to obtain cospectral graphs, called Godsil–McKay switching. In this talk, we suggest using automorphism groups of graphs as a general method to apply switching and construct many families of strongly regular graphs with the same parameters as the symplectic graph. In addition, we touch a certain compatibility with various graph products and switching as an application, and obtain the Doob graphs from the Hamming graphs by Godsil–McKay switching.

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