

# 平成 26 年度数学専攻プロジェクトゼミナール (現代数学ゼミナール)

プロジェクトゼミナールのお知らせです。これは談話会も兼ねております。

日時：12月10日(水) 16:30-17:30

場所：大学院自然科学研究科棟3階数理演習室(301号室)

講演者：Chuluundorj Bekh-Ochir (National University of Mongolia)

講演題目：On a conjecture of V.V. Shchigolev

要旨：V.V. Shchigolev has proven that over any infinite field  $k$  of characteristic  $p > 2$ , the  $T$ -space generated by  $G = \{x_1^p, x_1^p x_2^p, \dots\}$  is finitely based, which answered a question raised by A.V. Grishin. Shchigolev went on to conjecture that every infinite subset of  $G$  generates a finitely based  $T$ -space. In this paper, we prove that Shchigolev's conjecture was correct by showing that for any field of characteristic  $p > 2$ , the  $T$ -space generated by any subset  $G = \{x_1^p x_2^p \dots x_{i_1}^p, x_1^p x_2^p \dots x_{i_2}^p, \dots\}$ ,  $i_1 < i_2 < \dots$ , of  $G$  has a  $T$ -space generating set of size  $i_2 - i_1 + 1$ .

プロジェクトゼミナール担当 阿部健