

Department of Mathematics, BGU

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# Colloquium

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*On Tuesday, March 29, 2016*

*At 14:30 – 15:30*

*In Math -101*

MIKHAIL MUZYCHUK (NETANYA ACADEMIC COLLEGE)

will talk about

## **Isomorphism problem for Cayley combinatorial objects**

ABSTRACT: A Cayley combinatorial object over a group  $H$  is a relational structure on  $H$  invariant under the group of right translations  $H_R$ . Cayley graphs over the group  $H$  provide a well-known example of such objects. An isomorphism problem for Cayley graphs will be the central topic of my talk. I shall present Klin-Poeschel approach to this problem based on the method of Schur. In addition, some recent results about isomorphism problem for non-graphical Cayley objects will be discussed. (This talk will be part of Yom iuyn on Algebraic Combinatorics on the occasion of the retirement of Prof. Mikhail Klin)