

# BOREL CANONIZATION AND UNIVERSALLY BAIRE SETS

MENACHEM MAGIDOR

The problem of Borel canonization was introduced by Kanovei, Sabok and Zapletal . In the original setting given an Analytic equivalence relation  $E$  and an idea  $I$  on the reals. The problem is to find a Borel set  $B$  which is not in the ideal such that  $E$  restricted to  $B$  is Borel. In this generality the answer is "NO", but if we put some "nicety" conditions on  $I$  and an the equivalence relation  $I$  one can get a positive answer, assuming some large cardinals.(These results are due to W. Chan and O. Drucker, independently ).

In the talk we shall survey some possible generalizations of these results . For instance when we assume that the relation  $E$  is universally Baire.(Some of the results are joint results with W. Chan.)

EINSTEIN INSTITUTE OF MATHEMATICS, HEBREW UNIVERSITY OF JERUSALEM,  
JERUSALEM, 91904, ISRAEL

*E-mail address:* mensara@savion.huji.ac.il