## (NON)MEASURABILITY OF *I*-LUZIN SETS Marcin Michalski, marcin.k.michalski@pwr.edu.pl

For reasonable  $\sigma$ -ideal of sets we call a set A an  $\mathcal{I}$ -Luzin sets if for every  $I \in \mathcal{I}$  we have  $|A \cap I| < |A|$ . If such a set intersects each Borel  $\mathcal{I}$ -positive set on a set of the same cardinality, then we have super  $\mathcal{I}$ -Luzin set. Such a notion generalizes classic notion of Luzin sets and Sierpiński sets on the real line (or Euclidean space). We will give necessary and sufficient condition for  $\mathcal{I}$ -nomeasurability of  $\mathcal{I}$ -Luzin sets and, using the Smital Property (precisely-its weaker version), we will provide an easy way to generate super  $\mathcal{I}$ -Luzin sets ( $\mathcal{I}$ -Luzin sets that ) if only  $\mathcal{I}$ -Luzin sets exist. As a final result we shall show that if  $\mathfrak{c}$  is a regular cardinal and L is a generalized Luzin set and S- a generalized Sierpiński set, then their algebraic sum L + S belongs to the Marczewski ideal  $s_0$ .