ON CERTAIN ORDER ON IDEALS AND ON RELATED CARDINAL COEFFICIENTS

PIOTR BORODULIN–NADZIEJA AND BARNABÁS FARKAS

Abstract: We present cardinal coefficients connected to a natural partial order on the family of ideals on ω. These new coefficients are natural generalizations of the pseudo–intersection number $\mathfrak{p}$. We show consistency of some inequalities of these coefficients and classical ones, and other related combinatorial questions. Furthermore, we discuss ideals generated by almost disjoint families and towers, and we analyze related maximality properties of these families. We give some analytic motivations for the considered problems connected to sequential properties of spaces of measures with weak* topology.

Mathematical Institute, University of Wrocław
E-mail address: pborod@math.uni.wroc.pl

Budapest University of Technology and Economics (BME)
E-mail address: barnabasfarkas@gmail.com

2000 *Mathematics Subject Classification.* 03E17, 03E75.

Key words and phrases. orderings on ideals, cardinal coefficients of the continuum, almost disjoint families, convex Frechet–Urysohn property.

The first author was partially supported by the grant 2191/W/IM/09 from University of Wrocław. The second author was supported by Hungarian National Foundation for Scientific Research grant no 68262 and 77476.