1122-03-84 **Andrzej Roslanowski*** (roslanow@member.ams.org), Department of Mathematics, University of Nebraska at Omaha, 6001 Dodge Street, Omaha, NE 68182-0243, and **Saharon Shelah** (shelah@math.huji.ac.il), Institute of Mathematics, The Hebrew University of Jerusalem, 91904 Jerusalem, Israel. *Around Borel hulls.*

Let $\mathcal{S}$ be a family of subsets of $\mathbb{R}$ with the Baire property. *A Borel hull* on $\mathcal{S}$ is a mapping $\psi : \mathcal{S} \longrightarrow \mathrm{Borel}(\mathbb{R})$ such that for each $A \in \mathcal{S}$ we have

$$A \subseteq \psi(A) \quad \text{and} \quad \psi(A) \setminus A \text{ is meager.}$$

Similarly we define Borel hulls on families of Lebesgue measurable sets (replacing "meager" with "null"). If the hull ψ satisfies

$(\circledast)^{\mathrm{monot}}$ for all $A, B \in \mathcal{S}$ such that $A \subseteq B$ we have $\psi(A) \subseteq \psi(B)$,

then we call it a monotone Borel hull. If ψ satisfies

$(\circledast)^{\mathrm{trans}}$ for every $A \in \mathcal{S}$ and a real number r we have $\psi(A + r) = \psi(A) + r$,

then we say ψ is transitive.

We are interested in monotone and/or transitive Borel hulls on the null and meager ideals, as well as on the families of all measurable sets (in the respective senses). In relation to transitive hulls we will point out a strange asymmetry: there exists (in ZFC) a null non-meager subgroup of $(\mathbb{R}, +)$ but consistently there is no meager non-null such subgroup. (Received August 08, 2016)