# $QN$-SPACES AND COVERING PROPERTIES OF HUREWICZ

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The talk will be devoted to the following result motivated by the previous work of Bukovský, Fremlin, Haleš, Scheepers, and others:

**Theorem** [Tsaban-Z. 2007]
*A set of reals $X$ is a QN space if, and only if, each Borel image of $X$ in $\omega^\omega$ is bounded.*

Having all Borel images in $\omega^\omega$ bounded is equivalent to the Hurewicz covering property for countable Borel covers. We shall also discuss the relation of $QN$-spaces with other variants of the Hurewicz property.

## REFERENCES

[1] Tsaban, Boaz; Zdomskyy, L., *Hereditarily Hurewicz spaces and Arhangel'ski sheaf amalgamations,* Journal of the European Mathematical Society **14**:2 (2012), 353–372.

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