Catching sequences with ideals

Alexander Shibakov, Michael Hrušák*[1]

ashibakov@tntech.edu,
michael@matmor.unam.mx

We review the most recent results that use the Invariant Ideal Axiom introduced by the authors to present a full (consistent) topological classification of countable sequential groups. We then show that IIA has sufficient power to be an effective tool in studying sequences in general countable (not necessarily sequential) groups and uncountable groups. As an application we answer some questions asked by D. Shakhmatov, A. Arkhangel'skii, and M. Tkachenko. We conclude by stating a number of open questions.

[1]The research of Michael Hrušák was supported by PAPIIT grants IN100317 and IN104220, and CONACyT grant A1-S-16164