Selections principles in uniform topology

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Z. Frolik posed the following general problem: To find and to investigate uniform analogues of the most important classes of topological spaces and continuous mappings (the "uniformization" problem) at a seminar on topology at the Charles University (Prague). Therefore, the problem of "uniformization" of the topological spaces theory is relevant.

Selection principles of the theory of uniform spaces was first studied by L. Kocinac [1]. It follows from the definitions of uniform Menger, uniform Hurewicz, and uniform Rothberger spaces that they are intermediate between precompact and pre-Lindelöf spaces, and therefore should have many good properties.

In this work uniform Menger, uniform Hurewicz and uniform Rothberger spaces are studied. In particular, these uniform properties extend to uniformly continuous mappings.

[1] L. Kocinac, *Selection principles in uniform spaces*, Note di Matematica, 22 (2003), pp. 127–139.

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