

Persistent Properties in Uniform Box Products

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Introduced by Bourbaki in 1949, the uniformity of uniform convergence on the set of all continuous functions from a space Y to a uniform space X generates a topology that can differ from the topology of point-wise convergence. When Y is the space of natural numbers, this function space is known as the uniform box product of X , a term introduced by Scott Williams in 2001. This topology on the product set of countably many copies of X is finer than the Tychonoff yet coarser than the box topology. Not all properties persist in either of those products, and so the analogous question arises: if a uniform space has a certain property, does its uniform box product also have the property? This talk will discuss results around this theme.