Dolecki, Szymon; **Mynard, Frédéric**

Convergence-theoretic mechanisms behind product theorems. (English) Zbl 0953.54002

Topology Appl. 104, No. 1-3, 67-99 (2000).

From the abstract: Commutation of the topologizer with products, quotientness of product maps, preservation of some properties by products, topologicity of continuous convergence, continuity of complete lattices are facets of the same quest. A new method of multifilters is used to establish sufficient and necessary conditions for these properties in the framework of general convergence. Several classical results (of Whitehead, Michael, Boehme, Cohen, Day and Kelly, Hofmann and Lawson, Schwarz and Weck, Kent and Richardson, and others) are extended or refined.

Reviewer: Miroslav Hušek (Praha)

MSC:

54A05 Topological spaces and generalizations (closure spaces, etc.)
54B10 Product spaces in general topology
54C10 Special maps on topological spaces (open, closed, perfect, etc.)
54B30 Categorical methods in general topology
54B15 Quotient spaces, decompositions in general topology

Keywords:

Cartesian product; quotient; multifilter

Full Text: DOI