

**Lowen, R.; Verbeeck, C.**

**Local compactness in approach spaces. II.** (English) [Zbl 1106.54011](#)

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Various kinds of local compactness for approach spaces were introduced in a previous paper by the authors [*Int. J. Math. Math. Sci.* 21, No 3, 429–438 (1998; [Zbl 0906.54020](#))]. In the present paper, they define an analogy of open maps for approach spaces, called expansions. It is proved that every expansive contractive image of any locally compact approach space is locally compact of the same kind. Locally compact products are characterized similarly as in topological spaces.

Reviewer: [Miroslav Hušek \(Praha\)](#)

**MSC:**

[54D45](#) Local compactness,  $\sigma$ -compactness

[54A05](#) Topological spaces and generalizations (closure spaces, etc.)

[54B10](#) Product spaces in general topology

**Keywords:**

locally compact; approach space; open map; product

**Full Text:** [DOI](#) [EuDML](#)