

# On some classes of non-Archimedean Köthe spaces

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In this paper all linear spaces are over a non-Archimedean non-trivially valued field  $\mathbb{K}$  which is complete under the metric induced by the valuation  $|\cdot| : \mathbb{K} \rightarrow [0, \infty)$ . By a Köthe space we mean an infinite-dimensional Fréchet space with a Schauder basis and with a continuous norm. We introduce some classes of non-Archimedean Köthe spaces and study relations between them.

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