Manifolds modeled on the direct limits of Tychonov cubes

Oryslava Shabat, Lviv Academy of Printing

In the paper [1], the infinite-dimensional model space

$$I^{(\alpha)} = \varinjlim\{I^{\tau_0} \longrightarrow I^{\tau_0} \times \{0\} \longrightarrow I^{\tau_0} \times I^{\tau_1} \longrightarrow \dots\},$$

where $\alpha = (\tau_0, \tau_1, \dots)$ is a sequence of ordinal numbers such that $\omega < \tau_0 \leq \tau_1 \leq \dots$, is considered and characterized.

The aim of the talk is to develop a theory of infinite-dimensional manifolds modeled on the space $I^{(\alpha)}$, in particular, to prove the characterization, stability, open and closed embedding theorems in the spirit of [2].

1. O. Shabat and M. Zarichnyi, *Universal maps of k_ω-spaces*, Matem. studii **21** (1) (2004), 71–80.

2. K. Sakai, *On $\mathbb{R}^\infty$-manifolds and Q^∞-manifolds*, Topol. Appl. **18** (1984), 69–79.