1067-14-987Jérôme Poineau* (poineau@math.unistra.fr), IRMA, 7, rue René Descartes, 67084
Strasbourg, France. Topology of Berkovich Spaces.

In the late 80's, V. Berkovich came up with a new definition of analytic space over a non-Archimedean complete valued field. Let us mention that E. Hrushovski and F. Loeser have very recently found a model-theoretic version of it. Unlike the non-Archimedean valued fields they are built from, Berkovich spaces turn out to enjoy nice topological properties such as local compacity or local arcwise connectedness. More general tameness properties hold, for instance concerning the number of connected components of families of spaces. Such results have important consequences in the ramification theory of local fields with imperfect residue fields as defined by A. Abbes and T. Saito. (Received September 17, 2010)