Skurikhin, E. E.

Sheaf cohomology and the dimension of uniform spaces. (English. Russian original)

Zbl 1054.54513
Russ. Math. Surv. 58, No. 4, 800-801 (2003); translation from Usp. Mat. Nauk 58, No. 4, 157-158 (2003).

From the introduction: This work involves the definition of sheaves and sheaf cohomology for uniform spaces, the latter being isomorphic to the cohomology groups in [*V. I. Kuz'minov* and *I. A. Shvedov*, Sib. Mat. 5, 565–595 (1964; Zbl 0142.40401)], which are defined via finite coverings. Abstract theorems on cohomological dimension (Theorems 3–6) that follow from results of the author [*E. E. Skurikhin*, Trudy Mat. Inst. Ross. Akad. Nauk 239, 289–317 (2002); English transl., Proc. Steklov Inst. Mat. 239, 273–300 (2002)] thus contain results on the Isbell and Bredon dimensions.

MSC:

54E15 Uniform structures and generalizations
55N30 Sheaf cohomology in algebraic topology
54F45 Dimension theory in general topology
55M10 Dimension theory in algebraic topology

Full Text: DOI