P-05

Categorical Constructions in Cellular Sheaf Theory

Samuel Carp
Department of Applied Mathematics, University of Pennsylvania

We provide a solution to the problem of generating random Cellular Sheaves over a Cell Complex via a simple categorical construction. The insights the construction provides lead to the consideration of several other functorial constructions whose connections and implications we explore. In particular, the existence of a certain adjunction leads us to consider a class of cellular sheaves with interesting properties.