

1165-18-133

Emily Rudman* (rudman.21@osu.edu). *Towards a Dold-Kan correspondence for semigroups*. Preliminary report.

The Dold-Kan correspondence defines an equivalence of categories between chain complexes of abelian groups and simplicial abelian groups. I recently started work on creating a version of the Dold-Kan theorem for abelian semigroups with my postdoc mentor Sanjeevi Krishnan and collaborators Ranthony Edmonds and Sarah Klanderma. This problem is motivated by the bigger problem of extending a cohomology theory for sheaves. In this talk, I will talk about the traditional Dold-Kan correspondence and what we have done so far to alter it in this new setting. (Received January 15, 2021)