1157-13-409 **Hailong Dao***, 405 Snow Hall, 1460 Jayhawk Blvd, Lawrence, KS 66045, and **Joseph Doolittle** and **Justin Lyle**. *Minimal Cohen-Macaulay complexes.*

We define and study the notion of a minimal Cohen-Macaulay simplicial complex. We prove that any Cohen-Macaulay complex is shelled over a minimal one in our sense, and we give sufficient conditions for a complex to be minimal Cohen-Macaulay. We show that many interesting examples of Cohen-Macaulay complexes in combinatorics are minimal, including Rudin's ball, Ziegler's ball, the dunce hat, and recently discovered non-partitionable Cohen-Macaulay complexes. We further provide various ways to construct such complexes (Received February 03, 2020)