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R. Amzi Jeffs* (amzij@cmu.edu). *Realizing Tangled Sunflowers with Convex Sets.*

We will discuss some current problems and results in the study of convex codes, a topic which generalizes the more classical study of nerves of convex sets (sometimes referred to as “intersection patterns of convex sets”). We will discuss three families of codes related to sunflowers of convex open sets, which have recently played an important role in showing that the study of convex codes is a strong generalization of the study of nerves. We will explain an exact characterization of the embedding dimensions of the first family of codes, present some bounds on the embedding dimensions of the second family, and highlight how the third family may potentially further differentiate the study of codes from the study of nerves. (Received January 24, 2022)