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Kevin Iga*, 24255 Pacific Coast Hwy, Natural Science Division, Malibu, CA 90263. *Adinkras: Graphs that describe supersymmetry.*

An Adinkra is a kind of decorated graph, motivated by the supersymmetry algebra in particle physics. For physicists, it provides a visual and accessible way to understand the subject. But independently of this, Adinkras are interesting diagrams to study and play with. The study of Adinkras has surprising connections with other areas of math, like error correcting codes, algebraic topology, and combinatorics. Most recently, Adinkras have been seen to naturally embed in surfaces, and this not only sheds light on Adinkras, but also provides new ways to construct interesting surfaces. (Received January 11, 2021)