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and **Diego Manzano-Ruiz**. *Several variations of vertex coloring games.*

Alice and Barbara take turns to color the vertices of a given simple graph, with Alice starting first, so that no adjacent vertices share the same color. The first player who is unable to color a vertex loses the game. We consider the following two versions: 1. Alice uses color  $A$  and Barbara uses color  $B$ ; 2. both of them use a common color  $C$ . The first version is a small generalization of the game of Col, and the second version is called node-kayles in the literature. These games are studied by Berlekamp, Conway, Guy, and many others. We determine the winning strategies on some common families of graphs. We also combine them and form a third version, namely that Alice uses colors  $A$  and  $C$ , and Barbara uses color  $B$  and  $C$ . (Received September 12, 2017)