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Geir Agnarsson* (math.geir@gmail.com), Dept. of Math. Sciences, 4400 University Drive, MS: 3F2, Exploratory Hall, room 4400, Fairfax, VA 22030. *How to vertex color acyclic digraphs and what is it good for?*

Graph coloring was certainly a topic close to T. S. Michael's heart as is evident in his keen interest in a variety of art gallery problems and the elegant proof of Steve Fisk of the original Art Gallery Problem of a simple polygon. One of the earliest topics I had the pleasure to discuss at length with T. S. Michael about was that of coloring vertices of an acyclic digraph in such a way that two vertices with a common ancestor receives distinct colors. Optimal such colorings by the smallest number of colors have connections to problems for hypergraphs, BIBDs and finite geometries. In this talk we describe some problems, results and connections that tickled T. S. Michael's fancy. (Received September 12, 2018)