Switching Reconstruction of Digraphs and Coloured Graphs and Related Problems

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A *vertex switching* of a graph is the graph obtained by complementing the set of edges incident to a vertex. The question of reconstructing a graph from its 'deck' of vertex switchings was proposed by Stanley. We discuss analogues of this question for digraphs and coloured graphs, and present a variety of problems motivated by the methods and results obtained. This is joint work with Fabien Mercier (Paris 6).