
AMY WIEBE, Simon Fraser University

Golay sequence and array pairs

Golay complementary sequence pairs solve several problems in digital information processing. They have a rich existence pattern which includes several infinite families over different alphabets. Many families of Golay sequence pairs can be viewed as the projection of Golay array pairs. This multi-dimensional viewpoint considerably simplifies the construction and enumeration of Golay sequence pairs. We give an unexpected application of this approach which allows a simple reinterpretation of some classical and recently-discovered Golay sequence pairs.

This is joint work with Jonathan Jedwab and Matthew Parker.