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**Massimo Caboara** and **Sara Faridi\*** ([faridi@mathstat.dal.ca](mailto:faridi@mathstat.dal.ca)), Department of Mathematics & Statistics, Dalhousie University, Halifax, NS B3H 3J5, Canada. *Odd-Cycle-Free Complexes and the Koenig Property.*

In this talk we discuss a higher dimensional analogue of a bipartite graph by considering simplicial complexes that contain no odd cycles. We demonstrate that like bipartite graphs, most of these complexes satisfy the Koenig property. A much more general concept of a cycle already exists in hypergraph theory, and hypergraphs that do not contain odd cycles in this second sense are known as balanced hypergraphs. We discuss how our construction relates to the definition of balanced hypergraphs, and discuss properties of facet ideals of these constructions. (Received August 02, 2007)