David Cook II* (dcook8@nd.edu), Department of Mathematics, 255 Hurley Building, University of Notre Dame, Notre Dame, IN 46556-4618. Monomial ideals with persistent associated primes.

We introduce the uniform face ideal of a simplicial complex with respect to a given ordered proper vertex colouring. This ideal is a monomial ideal which is generally not squarefree. If the colouring satisfies a certain nesting property, we describe the associated primes, which we show to be persistent. (Received August 06, 2013)