David Cook II* (dcook8@nd.edu), Department of Mathematics, 255 Hurley Building, University of Notre Dame, Notre Dame, IN 46556-4618. Cellular resolutions of non-squarefree ideals associated to simplicial complexes.

We introduce the uniform face ideal of a simplicial complex with respect to a given ordered proper vertex colouring. We show that this monomial ideal has a minimal cellular resolution supported on a cubical complex if the colouring satisfies a certain nesting property. Using this, we give the graded Betti numbers in terms of the face-vector of the underlying simplicial complex. (Received August 06, 2013)