1145-57-2871 **Andrew A Cooper***, Box 8205, North Carolina State University, Raleigh, NC 27695, and **Vin de Silva** and **Radmila Sazdanovic**. *Simplicial Complexes and Configuration Spaces.*

We introduce a generalization of the configuration space of n points in a manifold X, which takes as its data a simplicial complex S. The simplicial configuration space $M(S, X)$ gives rise to two invariants of S: the compactly-supported cohomology $H_c^*(M(S, X))$ and its Euler characteristic $\chi_c(S, X)$.

Both the homology and the Euler characteristic satisfy deletion-contraction type relations with respect to minimal nonfaces; thus we regard them as 'chromatic' invariants of S. Many well-known facts about configuration spaces – work of Fadell-Neuwirth, Bendersky-Gitler, Fulton-Macpherson, and Baranovsky-Sazdanović – generalize nicely to simplicial configuration spaces. We will discuss these geometric results and how they can be used to locate information about the topology and combinatorics of the complex S within the (co)homology of $M(S, X)$. (Received September 25, 2018)