1053-13-167 **Timothy B.P. Clark*** (tbpclark@math.northwestern.edu), 2033 Sheridan Road, Mathematics Department, Evanston, IL 60208, and **Alexandre Tchernev** (tchernev@math.albany.edu), 1400 Washington Avenue, Department of Mathematics & Statistics, Albany, NY 12222. *CW complexes and poset resolutions.* Preliminary report.

Suppose that X is a regular CW complex. We utilize Björner's homotopy equivalence between X and its poset of cells $P(X)$ to establish a canonical isomorphism between the cellular chain complex of X and a complex of vector spaces associated to the poset $P(X)$ which is the output of a construction of Tchernev. When N is a monomial ideal whose (cellular) free resolution is supported by X, this isomorphism allows N to be resolved using a poset resolution. (Received September 01, 2009)