1117-00-132   **Jack Douthett*** (`douthett@comcast.net`). *n-Cubes, Boolean Rings, and Music Analysis.* Preliminary report.

A subgroup of the 12-cube symmetry group will be extended to a Boolean ring. This 12-cube ring is isomorphic to a 12-cube ring where the vertices represent pcsets, and the transformations are pcisets where the sum of pcisets is their symmetric difference and multiplication is their intersection. This idea will be employed to illustrate connections among the musical cubes of Douthett, Tymoczko, and others. (Received January 09, 2016)