1014-08-1630 Wolfram F Bentz* (wfbentz@alumni.uwaterloo.ca). Algebraic characterizations for topological separation properties.

In 1977, Walter Taylor showed that T_0 -topological algebras in congruence permutable varieties are Hausdorff. Since then, this result has been expanded by Gumm, Coleman, Kearnes, Sequeira, as well as myself up to the point that we are now closer to finding an algebraic characterization of the varieties with this property.

One can generalize the above question by replacing Hausdorffness with any other separation property stronger than T_0 . In this talk, I will give an introduction to the generalized problem, state a short summery of the current situation for different separation properties, and announce a new, not yet published result. (Received September 28, 2005)