

Meeting: 999, Nashville, Tennessee, SS 4A, Special Session on Universal Algebra and Lattice Theory

999-08-100 **Jaroslav Jezek*** (jezek@karlin.mff.cuni.cz), Charles University, Sokolovska 83, 18600 Praha, Czech Rep. *Homomorphic images of subdirectly irreducible algebras*. Preliminary report.

An algebra with at least one at least binary operation is a homomorphic image of a subdirectly irreducible algebra if and only if it is isomorphic to the factor of a subdirectly irreducible algebra through the monolith if and only if the intersection of all its ideals is nonempty. The construction (obtained together with T. Kepka and D. Stanovsky) is such that if the given algebra is finite then the subdirectly irreducible algebra is also finite. The case when there are only unary operations is more complicated. Together with P. Markovic and D. Stanovsky we give a characterization of the finite algebras with unary operations that are homomorphic images of finite subdirectly irreducible algebras; but such algebras are not necessarily isomorphic to a factor of a subdirectly irreducible algebra through the monolith. (Received August 16, 2004)