1011-06-22 **Jeffrey S. Olson*** (jsolson@math.uic.edu), MCSC Department, 851 S. Morgan St., Chicago, IL 60607-7045. *Structural Completeness in Algebras of Logic.*

A variety V is *structurally complete* when every proper sub-quasivariety of V is contained in a proper sub-variety of V. When a variety is hereditarily structurally complete (i.e., when all of its sub-varieties are also structurally complete) we say it is *primitive*. Primitive varieties may also be characterized as those in which every sub-quasivariety is actually a variety. Of course, every primitive variety is structurally complete; the reverse is not true in general.

It is well-known that many logical deductive systems have an "algebraic semantics" in the sense established by W.J. Blok and D. Pigozzi. The logical analogs of structural completeness and primitivity have precise and useful meanings, which we will describe. We will survey some recent results on structural completeness in algebras of logic, and introduce the following new result: The variety of positive Sugihara monoids is primitive. (Received July 05, 2005)