Wim Ruitenburg\* (wimr@mscs.mu.edu), Department of Mathematics, Marquette University, P.O. Box 1881, Milwaukee, WI 53201. *Model theory for intuitionistic predicate calculus*.

Model theory for intuitionistic predicate logic dates back at least to the 1960s with work by Kripke, Mints, and others. We discuss a recent renaissance with work along the lines of Visser, Ellison, Fleischmann, McGinn, Ruitenburg, Morteza Moniri, and Zaare. We consider preservation theorems reminiscent of the Chang-Łos-Szusko theorem, as well as formula hierarchies generalizing the classical ones of the forms  $\Pi_n^0$  and  $\Sigma_n^0$ . (Received July 12, 2009)