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George Metcalfe* (george.metcalfe@vanderbilt.edu), Mathematics Department, 1326 Stevenson Center, Vanderbilt University, Nashville, TN 37240. *Interpolation and Amalgamation for Ordered Algebraic Structures.*

In this talk I will explain how the logical property of interpolation can be used as a stepping stone to the algebraic property of amalgamation. In particular, I will give a simple proof of the so-called deductive interpolation property for abelian l-groups that implies not only the amalgamation property but also decidability and generation of the variety by the integers \mathbb{Z} . Moreover, the approach can be modified to establish the amalgamation property for the variety of MV-algebras, the algebraic semantics for Lukasiewicz logic. (Received December 15, 2008)