1089-06-326 **Nikolaos Galatos*** (ngalatos@du.edu). *Distributive integral residuated lattices have the FEP.*
A class of algebras $\mathcal{K}$ is said to have the *finite embeddability property* (FEP) if for every algebra $\mathbf{A}$ in $\mathcal{K}$ and every *finite* partial subalgebra $\mathbf{B}$ of $\mathbf{A}$, there exists a finite algebra $\mathbf{D}$ in $\mathcal{K}$ such that $\mathbf{B}$ embeds into $\mathbf{D}$.

A *residuated lattice* is an algebra $\mathbf{A} = (A, \wedge, \vee, \cdot, \backslash, /, 1)$ where $(A, \wedge, \vee)$ is a lattice, $(A, \cdot, 1)$ is a monoid and the following *residuation* property holds for all $x, y, z \in A$

$$xy \leq z \quad \text{iff} \quad x \leq z/y \quad \text{iff} \quad y \leq x\backslash z. \tag{res}$$

A residuateed lattice is called *distributive* if its lattice reduct is distributive; it is called *integral* if it satisfies $x \leq 1$ for all x.

We prove that every variety of integral, distributive residuated lattices axiomatized by identities that avoid divisions has the FEP. We obtain this result swiftly by using the general theory of residuated frames. The results are inspired by related work of C. Van Alten on the FEP for integral residuated lattices and of M. Kozak on the finite model property for distributive residuated lattices. (Received February 18, 2013)