

**Ghilardi, Silvio**

**Unification through projectivity.** (English) [Zbl 0894.08004](#)  
*J. Log. Comput.* 7, No. 6, 733-752 (1997).

The author proposes a new algebraic approach to unification under equational conditions. A unification problem is represented as a finitely presented algebra  $A$ , and a unifier for  $A$  is a morphism from  $A$  to some finitely presented projective algebra. This concept can be used to determine the unification types of various classes of algebras via categorical equivalence, e.g., for the variety of distributive lattices; for the variety of Brouwerian semilattices, a unification type is established which is, in a sense, stable under adjunction of extra constants.

Reviewer: [M.Armbrust \(Köln\)](#)

**MSC:**

[08A70](#) Applications of universal algebra in computer science  
[03B35](#) Mechanization of proofs and logical operations  
[68W30](#) Symbolic computation and algebraic computation  
[68T15](#) Theorem proving (deduction, resolution, etc.) (MSC2010)

Cited in **2** Reviews  
Cited in **22** Documents

**Keywords:**

E-unification; algebraic approach to unification under equational conditions; finitely presented algebra; projective algebra; categorical equivalence; Brouwerian semilattices

**Full Text:** [DOI](#)