1035-18-1930   **Daniel Kiteck*** (`dkiteck@ms.uky.edu`), 342 S Limestone, Lexington, KY 40508. *Covers for Interpretations.*

In mathematical logic one can fix a formal language of symbols that can represent constants, functions and relations. One can then describe a category of all possible interpretations of this fixed language.

Categorical precovers and covers can be described as generalizations of the homological algebraic concept of a projective module.

Let J be the category of all interpretations of the first-order language with only a unary function. I will use direct limits to describe a J-precover for each interpretation of the smallest possible first-order language and then demonstrate the existence of a J-cover for each one. (Received September 20, 2007)