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Wesley Calvert* (wcalvert@siu.edu), Department of Mathematics, Mail Code 4408, 1245
Lincoln Drive, Carbondale, IL 62901. *PAC Learning, VC Dimension, and the Arithmetic
Hierarchy.*

We compute that the index set of PAC-learnable concept classes is m -complete Σ_3^0 within the set of indices for all concept classes of a reasonable form. All concept classes considered are computable enumerations of computable Π_1^0 classes, in a sense made precise here. This family of concept classes is sufficient to cover all standard examples, and also has the property that PAC learnability is equivalent to finite VC dimension. (Received January 16, 2015)