## World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:11, No:09, 2017

## Theorem on Inconsistency of The Classical Logic

Authors: T. J. Stepien, L. T. Stepien

**Abstract :** This abstract concerns an extremely fundamental issue. Namely, the fundamental problem of science is the issue of consistency. In this abstract, we present the theorem saying that the classical calculus of quantifiers is inconsistent in the traditional sense. At the beginning, we introduce a notation, and later we remind the definition of the consistency in the traditional sense. S1 is the set of all well-formed formulas in the calculus of quantifiers. RS1 denotes the set of all rules over the set S1. Cn(R, X) is the set of all formulas standardly provable from X by rules R, where R is a subset of RS1, and X is a subset of S1. The couple < R, X > is called a system, whenever R is a subset of RS1, and X is a subset of S1. Definition: The system < R, X > is consistent in the traditional sense if there does not exist any formula from the set S1, such that this formula and its negation are provable from X, by using rules from R. Finally, < R0+, L2 > denotes the classical calculus of quantifiers, where R0+ consists of Modus Ponens and the generalization rule. L2 is the set of all formulas valid in the classical calculus of quantifiers. The Main Result: The system < R0+, L2 > is inconsistent in the traditional sense.

**Keywords:** classical calculus of quantifiers, classical predicate calculus, generalization rule, consistency in the traditional sense, Modus Ponens

**Conference Title:** ICLM 2017: International Conference on Logic and Mathematics

**Conference Location :** Paris, France **Conference Dates :** September 21-22, 2017