1145-34-921   **Youssef Naim Raffopul*** (`yraffoul1@udayton.edu`), 300 College Park, Dayton, OH 45469-2316. *New Variation of Parameters Formula that Leads to Stability in Integro-differential Equations.* Preliminary report.

In this work we introduce a function $v(t)$ to invert a given integro-differential equation and obtain a new variation of parameters formula. The new variation of parameters formula will be used, along with fixed point theory to arrive at stability results. Our work extends and improve the results in the literature.

(Received September 17, 2018)