CHAOS 2009

2nd Chaotic Modeling and Simulation International Conference

June 1 - 5, 2009 Chania Crete Greece

www.chaos2009.net

Application of HeB's parameter-expansion method to synchronization dynamics of coupled Van der PolB–Duffing oscillators

N. H. Sweilam Cairo University, Faculty of Science, Mathematics Department, Giza, Egypt n sweilam@yahoo.com

In this Paper we apply HeB's parameter-expansion method (PEM) to synchronization dynamics of coupled Van der PolB–Duffing oscillators. The method, taking full advantage of the perturbation method, does not depend upon small parameter assumption. One iteration step provides an approximate solution which is valid for the whole solution domain.