

## Method of Successive Approximations for Modeling of Distributed Systems

**Authors :** A. Torokhti

**Abstract :** A new method of mathematical modeling of the distributed nonlinear system is developed. The system is represented by a combination of the set of spatially distributed sensors and the fusion center. Its mathematical model is obtained from the iterative procedure that converges to the model which is optimal in the sense of minimizing an associated cost function.

**Keywords :** mathematical modeling, non-linear system, spatially distributed sensors, fusion center

**Conference Title :** ICAM 2014 : International Conference on Applied Mathematics

**Conference Location :** Paris, France

**Conference Dates :** July 21-22, 2014