

Simulation of ARMAX model for

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Abstract—
Index Terms—

I. INTRODUCTION

II. PROBLEM FORMULATION

III. THEORETICAL APPROACH

As previously mentioned, this work is devoted to the simulation and short analysis of an ARMAX system for ; hereby, the general ARMAX model is presented:

$$z_{t+1} = \sum_{i=0}^{h_1} a_i z_{t-i} + \sum_{i=0}^{h_2} b_i u_{t-i} + \sum_{i=0}^{h_3} c_i \xi_{t-i} \quad (1)$$

where u_k are external inputs and ξ_k are random noises. In this specific case, the model obtained in [1],

$$\begin{aligned} z_t = & 237.565 + 0.426z_{t-1} + \xi_t - 0.153\xi_{t-1} + 8.9087u_{1,t} \\ & - 1.557u_{7,t} + 31.919u_{8,t} - 2.045u_{9,t} \end{aligned} \quad (2)$$

IV. NUMERICAL ASPECTS

V. NUMERICAL RESULTS

VI. CONCLUSIONS

REFERENCES

- [1] Y. Li, Y. Su, and L. Shu, "An armax model for forecasting the power output of a grid connected photovoltaic system," *Renewable Energy*, vol. 66, pp. 78–89, 2014.