

### Solar Power Energy System Network Modeling

이수빈, 류준형<sup>1,\*</sup>, 이인범  
포항공대; <sup>1</sup>동국대학교  
(jhryu@dongguk.ac.kr\*)

Renewable energies can be best useful when their output are forecasted within a reasonable margin. The performance of renewable energy forecasting does thereby play an important role in increasing the stability of renewable energy systems and in the end raising their reliability in the overall energy grid. Motivated by this need, this paper investigates a methodology to forecast power output of photovoltaic energy generation. The state-of-the-art artificial intelligence based neural network and the up-to-date linear/nonlinear time series methodologies are studied with the comparison of their performance. It has been shown that the specially tuned neural network based method showed the best results.