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**Global convergence for discrete dynamical systems and forward neural networks. (English summary)**

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The paper contains a result on lower triangular maps

$$F(x_1, x_2, \dots, x_q) = [f_1(x_1), f_2(x_1, x_2), \dots, f_q(x_1, x_2, \dots, x_q)]$$

characterizing discrete dynamical systems  $\vec{x}_{t+1} = F(\vec{x}_t)$ . Conditions on the functions  $f_1, \dots, f_q$  are indicated which imply that the origin is the only fixed point of  $F$  and that all the orbits of the dynamical system converge to this fixed point. It is also shown how some forward neural networks work can be described by such dynamical systems and consequences are drawn about the convergence of such networks.

Reviewed by *Lorenzo Peccati*

## References

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*Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.*