

BACKPROPAGATION IN CHAOTIC NEURAL NETWORKS

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1. INTRODUCTION

1.1. Literature review.

1.2. Main results.

2. UNSTABLE NEURAL NETWORKS

2.1. Lyapunov spectrum.

2.2. Lyapunov vectors.

2.3. Adjoint Lyapunov spectrum and duality.

3. BACKPROPAGATION UNDER GRADIENT EXPLOSION

3.1. Conventional difficulty.

3.2. Backpropagation via adjoint shadowing.

3.3. Kernel differentiation method.

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