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Modern Complexity Theory

Spring 2005

Assignment 10

Problem 29 (2 points)**:**
Prove Theorem 13.1.

Problem 30 (3 points)**:**
Prove Theorem 13.2.

Problem 31 (2 points)**:**
Prove Theorem 14.1.

Problem 32 (3 points)**:**
Prove one direction of Theorem 14.3: if $q_i \cdot q_j = q_k \cdot q_\ell$ for all i, j, k, ℓ with $p_{(i,j),(k,\ell)} > 0$ and the QDS is symmetric, locally reversible, and aperiodic, then the distribution $\boldsymbol{q}$ is stationary.