



# Analysis of Network Revenue Management under Uncertainty \*\*

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**Abstract:** This paper investigates robust dynamic policies for network revenue management problems with uncertainty involved. We formulate such a problem in a setting of semi-definite programming and propose a heuristic procedure to find robust solutions. We also derive sufficient conditions for finding an approximation of the value function. Numerical experiments are included to illustrate the proposed approach.

**Keywords:** *Robust optimization; dynamic programming; revenue management; uncertainty.*

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