Two Optimal Control Problems and Their Solutions

Devin Ali Sezer

joint with Ferruh Özbudak and Çağrı Haksöz

The talk will review two stochastic optimal control problems that we have studied recently. The first problem comes from an asymptotic analysis of bounds on orthogonal arrays; the second problem is a model of product recalls. In our approach to both of these problems, one of the key steps is to write down a dynamic programming equation (DPE) satisfied by 'the value function' of the problem. We will describe the DPEs of these problems and explain some of the ideas that we used in their solution.