

**Indiana University-Purdue University
Indianapolis
Department of Mathematical Sciences**

STATISTICS SEMINAR

12:15pm—1:15pm, Tuesday, April 16, 2019
LD 265

Speaker: Debolina Chatterjee
Department of Mathematical Sciences, IUPUI

Title: Availability of a Periodically Inspected System, Maintained Under an Imperfect-Repair Policy

Abstract:

A periodically inspected system is maintained through a fixed number of imperfect-repairs before being replaced or perfectly repaired. The lifetime distribution of the system in its new and imperfectly repaired states is arbitrary. The times required for imperfect repairs and for perfect repair or replacement are random. The repaired system is restored to operation at the next scheduled inspection time. The system availability function is expressed as the weighted average of the survival functions and their shifts, and gives the limiting average availability.