

Railway operations management problems

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The talk gives an overview on a range of interesting problems and decision areas in conventional rail systems, but also applicable to metro rail operations, derived from examples in India, where rail is an important mode of transport both for passenger and freight. The mathematical structure of some the problems is explored, emphasizing the physical infrastructure capacity constrained nature of many planning problems in this particular environment. This leads to interesting variants even for problems that are well understood and well studied. Attempts at problem structuring and some implementation issues are also discussed.