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Sommario/riassunto	While traditionally sequential approaches have been used to deal with the cyclic/non-cyclic crew rostering problem in public transit, Lin Xie focuses on several solution approaches based on a novel network design to solve this task within one step. This is due to the fact that sequential planning often produces some unassigned duties that require additional drivers to cover them, while some drivers do not get jobs on some days. This integrated approach reduces additional personnel/operational costs and improves the satisfaction of drivers compared with the sequential one. Moreover, the author develops a web-based decision support system, which supports the planner in choosing a customized model as well as a suitable solution approach

for solving the problem. Contents Cyclic and Non-Cyclic Crew Rostering in Public Transit Mathematical Programming and Optimal Crew Rostering Column Generation and Metaheuristics for Solving the Crew Rostering Problem Web-Based Decision Support System for Crew Rostering Target Groups Researchers and students in the fields of business information systems, computer science, mathematics with a focus on operations research and decision support systems Practitioners in the fields of transportation and crew rostering The Author Lin Xie holds a doctoral degree from the Faculty of Business Administration and Economics at the University of Paderborn. She is a research associate in the Decision Support & Operations Research Lab at the University of Paderborn.
