Spanning trees with node degree dependent costs and knapsack reformulations

Luis Gouveia and Pedro Moura

CIO/DEIO - University of Lisbon, Portugal
legouveia@fc.ul.pt

We consider an extension of the degree constrained spanning tree problem where besides the usual edge costs, we also consider node costs which depend of the degree of the nodes. We consider discretized models as well knapsack reformulations in order to linearize the objective function of a standard non linear model. The two approaches will be considered as well as model enhancements