

Algorithm SUM

Input: a finite sequence of travel requests $\sigma = \sigma_1 \sigma_2 \dots, \sigma_i = (t_i, p_i)$; requests given in chronological order; $\text{BP}(\mathbf{C}, \beta, \mathbf{T})$.

Output: B-schedule and ticket prices.

For a travel request (t, p) buy a Bahncard iff

- 1.) SUM owns no Bahncard at t
- 2.) the regular T-cost at time t , i.e., the sum of all regular requests in $(t - T, t]$, $rr_{\text{SUM}}^\sigma(t)$, is at least c_{crit} :

$$rr_{\text{SUM}}^\sigma(t) \geq c_{\text{crit}}$$