

- $n \leq 10^5$  people visit a restaurant and need to pay.
- Each person has their own share  $b_i$  and an amount of cash  $a_i$ .
- One person will pay the entire bill and receive the cash from all others.
- Choose that person so they do not have to pay more than their own share  $b_i$ .
- There may be no such person.



KIT teams having a celebration dinner after  
NWERC.

Photo by Christopher Weyand