Multiprocessor task problems with dedicated processors and preemption

- maximal polynomially solvable:

  \[ Pm | r_i; pmtn; fix_i | L_{max} \quad \text{Bianco et al. (1997) [1]} \]

  \[ P2 | pmtn; fix_i | \sum C_i \quad \text{Cai et al. (1998) [2]} \]

- maximal pseudopolynomially solvable:

  \[ P|mtn; pmtn; fix_i | \sum C_i \quad \text{Hoogeveen et al. (1994) [3], Kubale (1990) [4]} \]

  \[ P2 | chains; pmtn; fix_i | C_{max} \quad \text{Hoogeveen et al. (1994) [3]} \]

  \[ P | pmtn; fix_i | \sum C_i \quad \text{Hoogeveen et al. (1994) [3]} \]

  \[ P2 | chains; pmtn; fix_i | \sum C_i \quad \text{Hoogeveen et al. (1994) [3]} \]

  \[ P2 | pmtn; fix_i | \sum w_i C_i \quad \text{Oguz & Qi (2006) [5]} \]

- minimal NP-hard:

  \[ P2 | r_i; pmtn; fix_i | \sum C_i \]

  \[ P3 | pmtn; fix_i | \sum C_i \]

  \[ P2 | pmtn; fix_i | \sum U_i \]

  \[ P2 | pmtn; fix_i | \sum T_i \]

- maximal open:

  \[ Pm | r_i; pmtn; fix_i | \sum w_i U_i \]

  \[ Pm | r_i; pmtn; fix_i | \sum T_i \]
References


