

## Opportunistic Load Balancing

ETC (Expected Time to Compute Matrix)

S.No	R1 (10 MIPS)	R2 (12)	R3 (14)	R4 (15)
T1 (200 MI)	20	16.66	14.28	13.33
T2 (150 MI)	15	12.50	10.71	10
T3 (160 MI)	16	13.33	11.42	10.66
T4 (210 MI)	21	17.50	15	14
T5 (230 MI)	23	19.16	16.42	15.33
T6 (90 MI)	9	7.50	6.42	6
T7 (110 MI)	11	9.16	7.85	7.33
T8 (230 MI)	23	19.16	16.42	15.33

T9 (130 MI)	13	10.83	9.28	8.66
T10 (175 MI)	17.50	14.58	12.50	11.66

– 10 Tasks (Size (MI))

Resources – 4 (Size (MIPS))

$$R1 = 34$$

$$R2 = 37.07$$

$$R3 = 27.13$$

$$R4 = 33.66$$

$$\text{Makespan} = 37.07s$$

Average Resource Utilization:

$$(R1+R2+R3+R4)/(4*M) = 0.896$$

$$=89.6\%$$