

Figure 9: Relation between average node degree and synchronization (values averaged over 30 replications per experiment), for all networks, all CoV values and workload level 90%. Variants of Network III and V are visualized by colour gradient (the darker colour stands for more links in the networks: larger  $p_c$  and p).

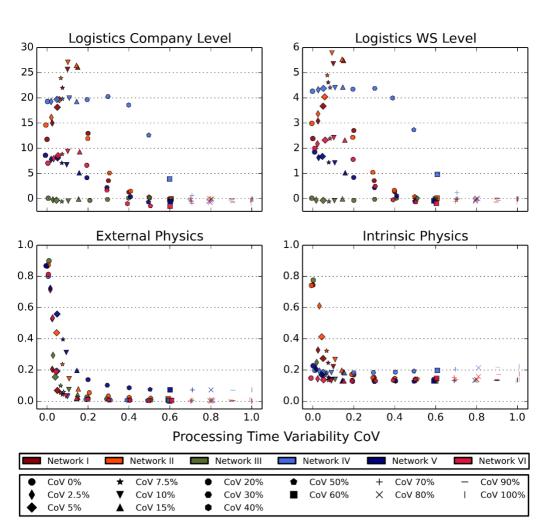


Figure 10: Relation between processing time variability and synchronization (values avaraged over 30 replications per experiment), for six basic networks, all CoV values and workload level 90%.

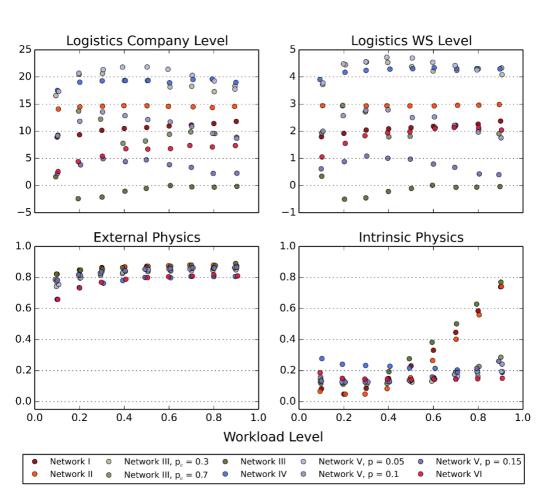


Figure 11: Relation between workload level and synchronization (values averaged over 30 replications per experiment), for six basic networks, two Network III variants ( $p_c = 0.30$  and  $p_c = 0.70$ ) and two Network V variants (p = 0.05 and p = 0.15), CoV 0% and workload level 10-90%.

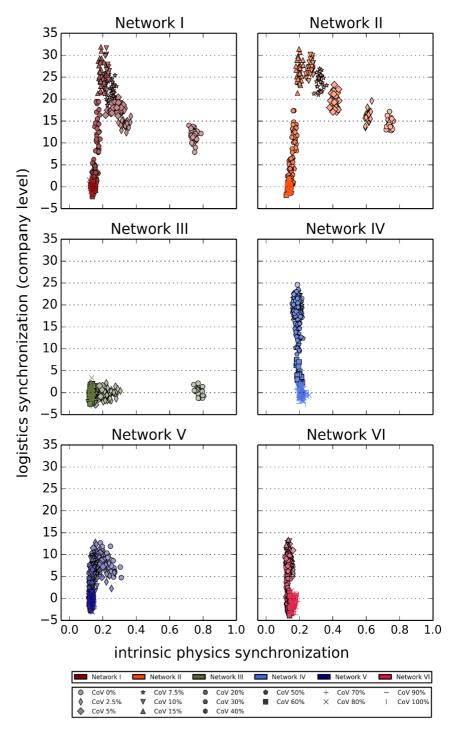


Figure 12: Relation between logistics synchronization on company level (z-score) and intrinsic physics synchronization with interval of 1 day (averaged over all days).

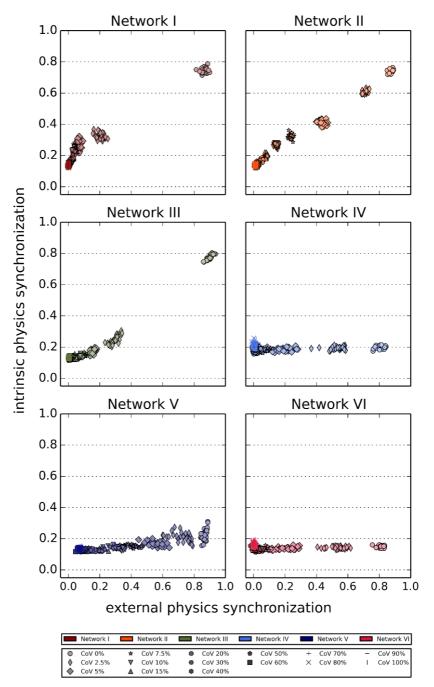


Figure 13: Relation between external physics synchronization for phase  $\omega = 0.1$  days (averaged across all WSs) and d intrinsic physics synchronization with interval of 1 day (averaged over all days).

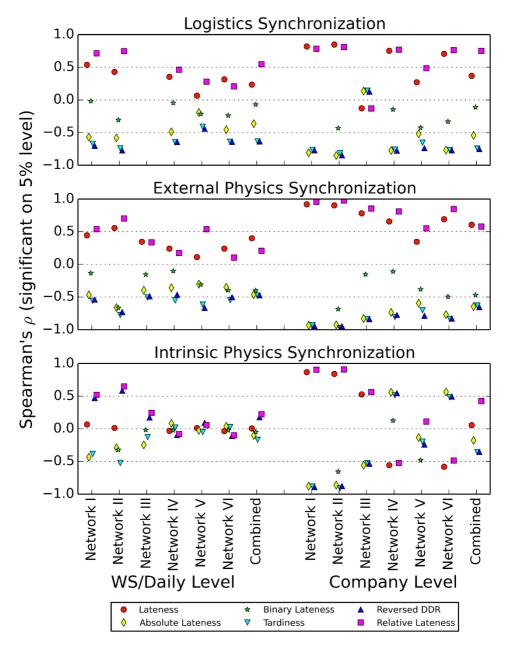


Figure 14: Relation between synchronization and due date performance measures.