Notation for Queueing Models (Kendall)

A/B/n/p/k

- A refers to the **arrival process**.
  Assumption: IID interarrival times.
  Interarrival time distribution:
  - M = exponential (memoryless)
  - D = deterministic
  - G = general
- B refers to **service times**.
  Assumption: IID service times.
  Service time distribution:
  - M = exponential (memoryless)
  - D = deterministic
  - G = general
- n = nr of (parallel) servers
- p = nr of system places
  = nr of servers + waiting places
- k = size of customer population
- Default values (usually omitted):
  - $p = \infty$, $k = \infty$
- Examples:
  - M/M/1
  - M/D/1
  - M/G/1
  - G/G/1
  - M/M/n
  - M/M/n/n+m
  - M/M/∞ (Poisson model)
  - M/M/n/n (Erlang model)
  - M/M/k/k/k (Binomial model)
  - M/M/n/n/k (Engset model, $n < k$)

IID = independently and identically distributed

THE END