

# Device server for vacuum statistic parameters

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- Objectives:
  - Monitoring and diagnostics of vacuum in accelerator
  - Preparation for dynamic modelling
  - A certain master thesis...
- Use case: straightforward

# Detailed interface

- Only attributes:
  - Average pressures:
    - Bending magnets sections
    - Straight sections
    - Ring-wide average
  - Average pressures divided by current
  - Maximum pressure and its location
  - Momentary beam dose (current \* lifetime)
  - „Brush” – rate of conditioning (energy \* current)

# Conclusions

- Operation-ready
  - Small issues, fixes on the way
  - <https://github.com/synchrotron-solaris/dev-solaris-vacuumparameters>
- Future:
  - Moving to Facade
  - Modelling pressures in the storage ring as a stochastic process
    - ARMAX model