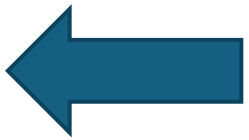
Agenda

- Introduction of the SOLARIS light source
- Anomaly detection with ML, forecasting, detecting beam distortion, ground disturbance and BPM maintenance
- ML in accelerator data analysis
- Conclusions

The problems

- Anomaly detection package for „on the fly” diagnostics (RF Cavity problem, mechanical movement)
- Accelerator stability forecast
- Fit optimization for physical analysis

The possible „**solution**”



- **Fast deployment**
- **Engineering** non-scientific approach (plug & play)
- Lots of ready to use easy packages
- In the future one can switch to **Theano** for custom neuron design, **possible publication**