TangoJS
– a web-based interface for TANGO Control System

Michał Liszcz[1], Włodzimierz Funika[1,2], Łukasz Żytniak[3]

[1] AGH, Faculty of Computer Science, Electronics and Telecommunication, Dept. of Computer Science
[2] AGH, ACC Cyfronet AGH
[3] National Synchrotron Radiation Centre Solaris

KUKDM'16, Zakopane
March 16-18

AGH University of Science and Technology

CYFRONET

SOLARIS
NATIONAL SYNCHROTRON RADIATION CENTRE

Motivation and Goals

- **TANGO Control System** is a CORBA-based solution for controlling hardware in scientific facilities;
- Operators need GUIs – *synoptic panels* – to monitor hardware components;
- Modern GUI applications are often built using web-based approach, due to fast prototyping, ease of deployment and great tooling support;
- *Unfortunately, CORBA – and TANGO – applications cannot run in web browser*;
- **GOAL: allow for browser-based TANGO client applications**.

TangoJS solution

- Modular, extensible architecture
- Core API written in Javascript / ES2015
  partly generated from TANGO IDL;
- Connector interface
  abstracts-out server-side implementation details;
- Widget toolkit
  framework-agnostic solution based on Web Components spec;