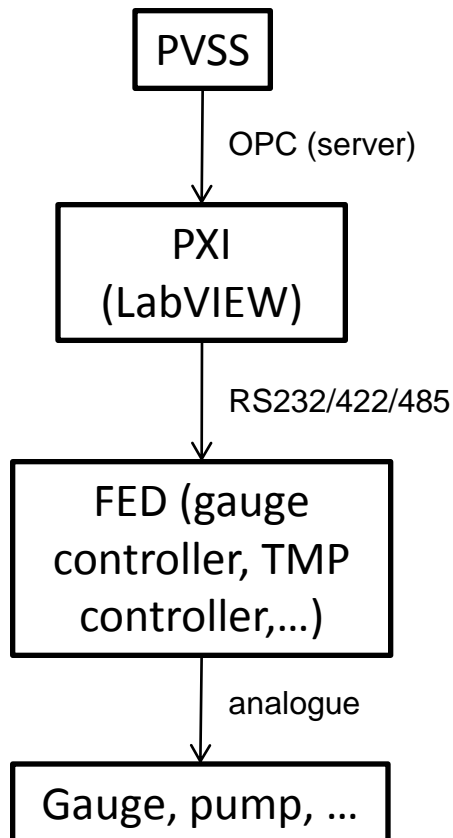# WP Vacuum Control System

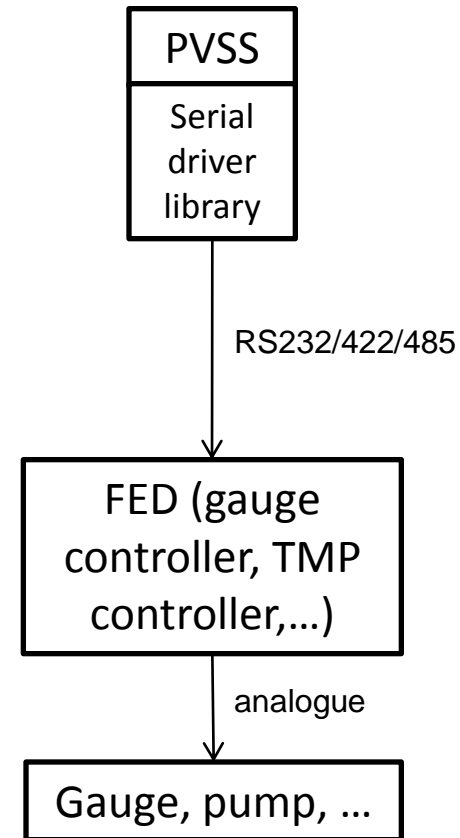## 2nd MACS week 2010

Joachim Wallner

Baseline

- No electronics in the accelerator hall → all signals from and to the rack room are transmitted analogue

- Interface between the control system and the controllers of the equipment is always RS232/422/485

- PVSS as SCADA

- Not time critical → control system runs on a dedicated server independently from the other control systems

Two possible solutions

1.

PVSS

↓ OPC (server)

PXI (LabVIEW)

↓ RS232/422/485

FED (gauge controller, TMP controller,…)

↓ analogue

Gauge, pump, …

2.

PVSS

Serial driver library

↓ RS232/422/485

FED (gauge controller, TMP controller,…)

↓ analogue

Gauge, pump, …

Schedule for the control system

- Conceptual design: October to December 2010
- Training to use development infrastructure (LabVIEW, PVSS, ...): October 2010 to January 2011
- Development of the vacuum control system: February to July 2011

Needed ressources

- Training and support by the WP Controls
  - PVSS
  - LabVIEW
- One programmer – will be hired for 6 months (?, depending on workload)
- PVSS serial driver library

Thanks for your attention

Any questions?