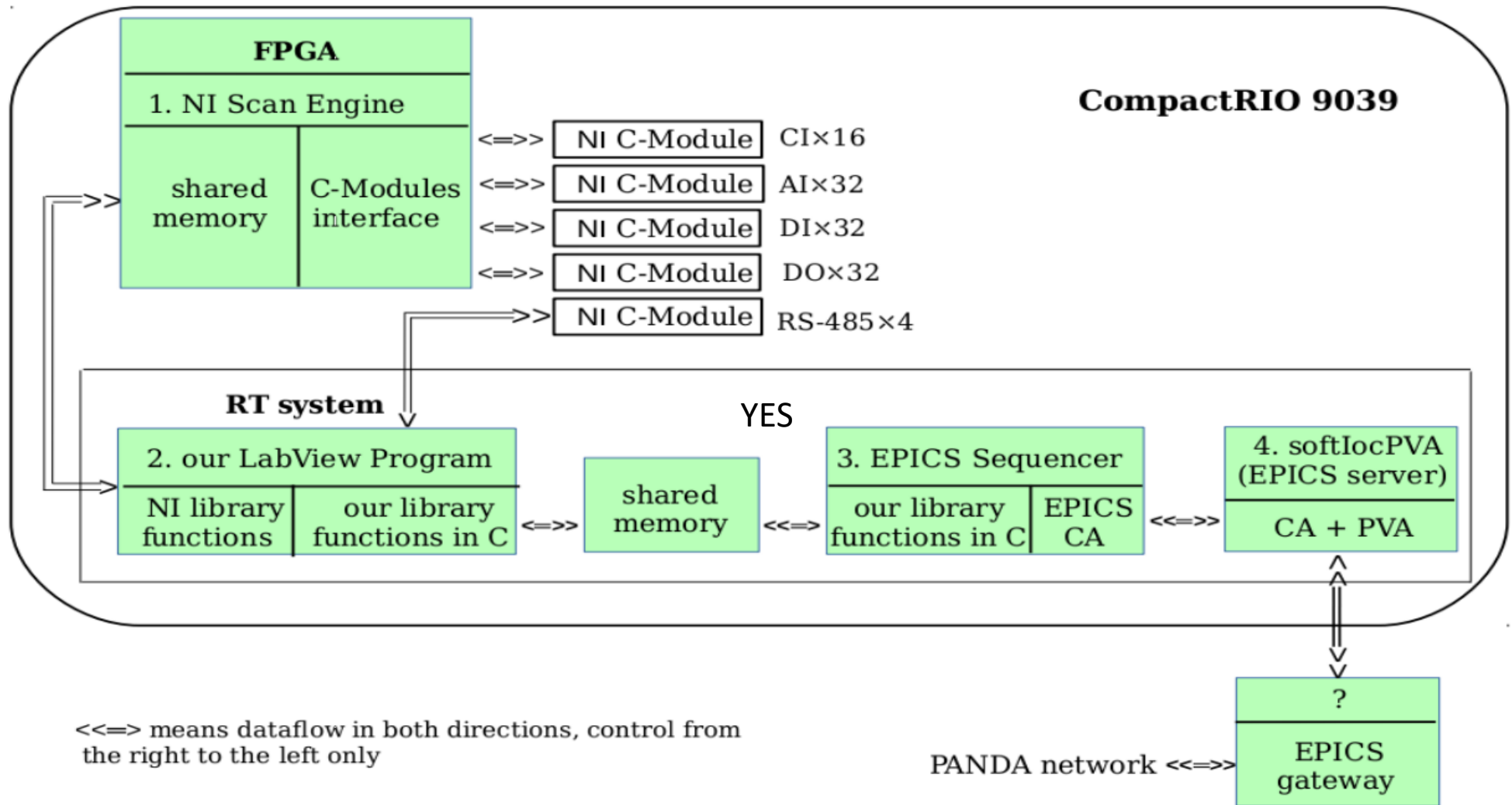


Possible CRio-EPICS Communication

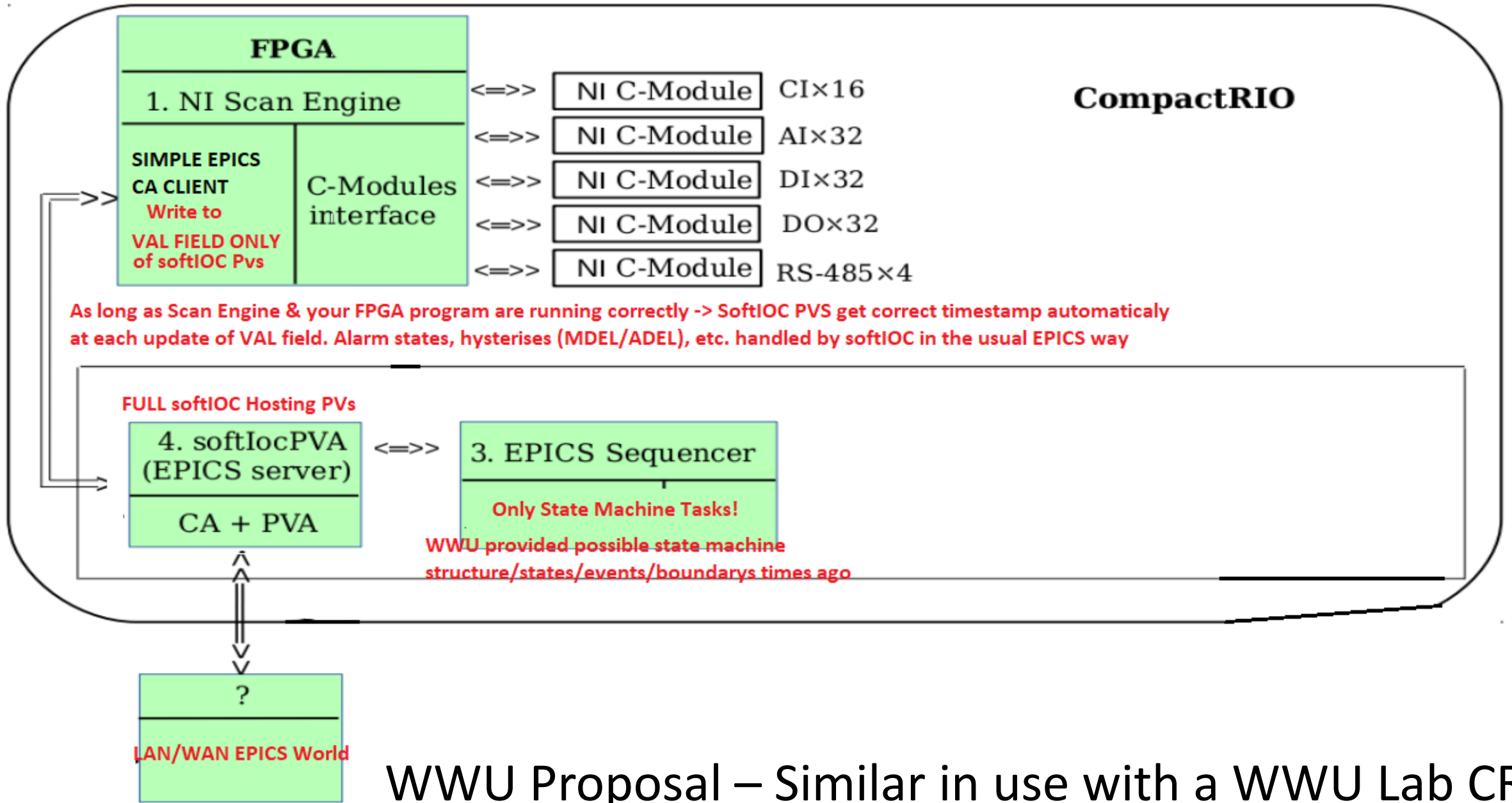
PANDA Collaboration Meeting 2020/3
GSI Darmstadt, Germany - Online

Benjamin Hetz
WWU Münster





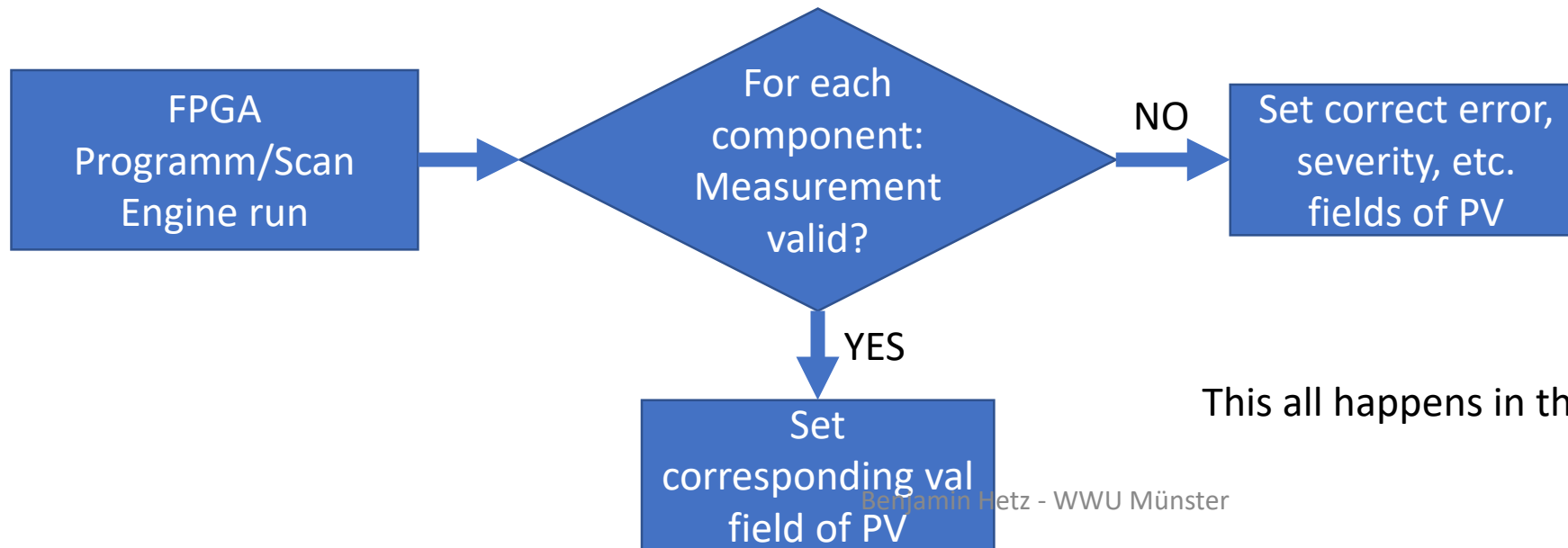
Original NCBJ Scheme



WWU Proposal – Similar in use with a WWU Lab CRio

Error Propagation from FPGA to (Soft)PVs

- CRio EPICS CA-Client implementation is very basic, because it must run on a FPGA!
- No complete knowledge about PV structures, only simple CA communication writing to a PV field (VAL as default, other if explicitly named (similar to „normal EPICS“)).
- Nevertheless, it can write to all Fields! FPGA program must take care to directly set the right (soft)PV-fields values!
- We (WWU) use a scheme like that in our lab CRio (simplified idea here):
 - Supply some kind of (soft)IOC with passive PVs
 - Add all needed PVs and their fields manual to the CRIO CA-Client (e.g., PressureX.Val, PressureX.NSEV, PressureX.NSTA, PressureX.PROC, etc.)
 - Then:



This all happens in the CRIO program. Not the IOC!