

## AN OPC-UA BASED ARCHITECTURE FOR THE CONTROL OF THE ESPRESSO SPECTROGRAPH @ VLT

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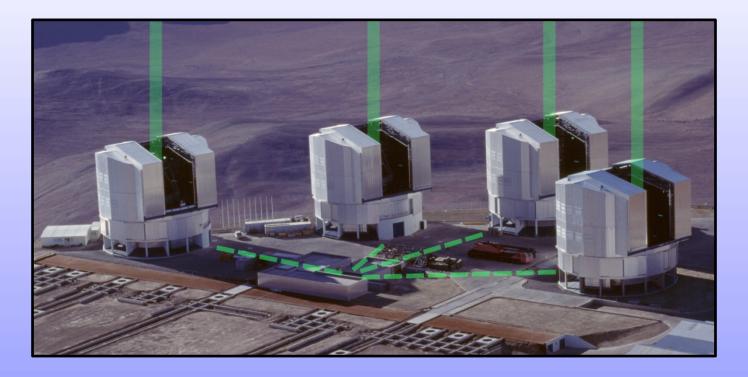
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## THE ESPRESSO SPECTROGRAPH @ VLT

- Fiber-fed, cross-dispersed, high-resolution echelle spectrograph for the ESO Very Large Telescope
- Designed to combine incoherently the light coming from up to 4 VLT Unit Telescopes







## **ESPRESSO CONTROL SYSTEM AND OPC-UA**

- Control software architecture based on the VLT Control Software
- Control electronics based on industrial PLCs
- OPC-Unified Architecture: platform-independent standard through which various kinds of systems and devices can communicate by sending messages between clients and servers over TCP networks
- ESPRESSO uses OPC-UA as communication protocol between the instrument control software and the PLC device drivers