


5th Annual Neutron Instrumentation  
Engineering Workshop

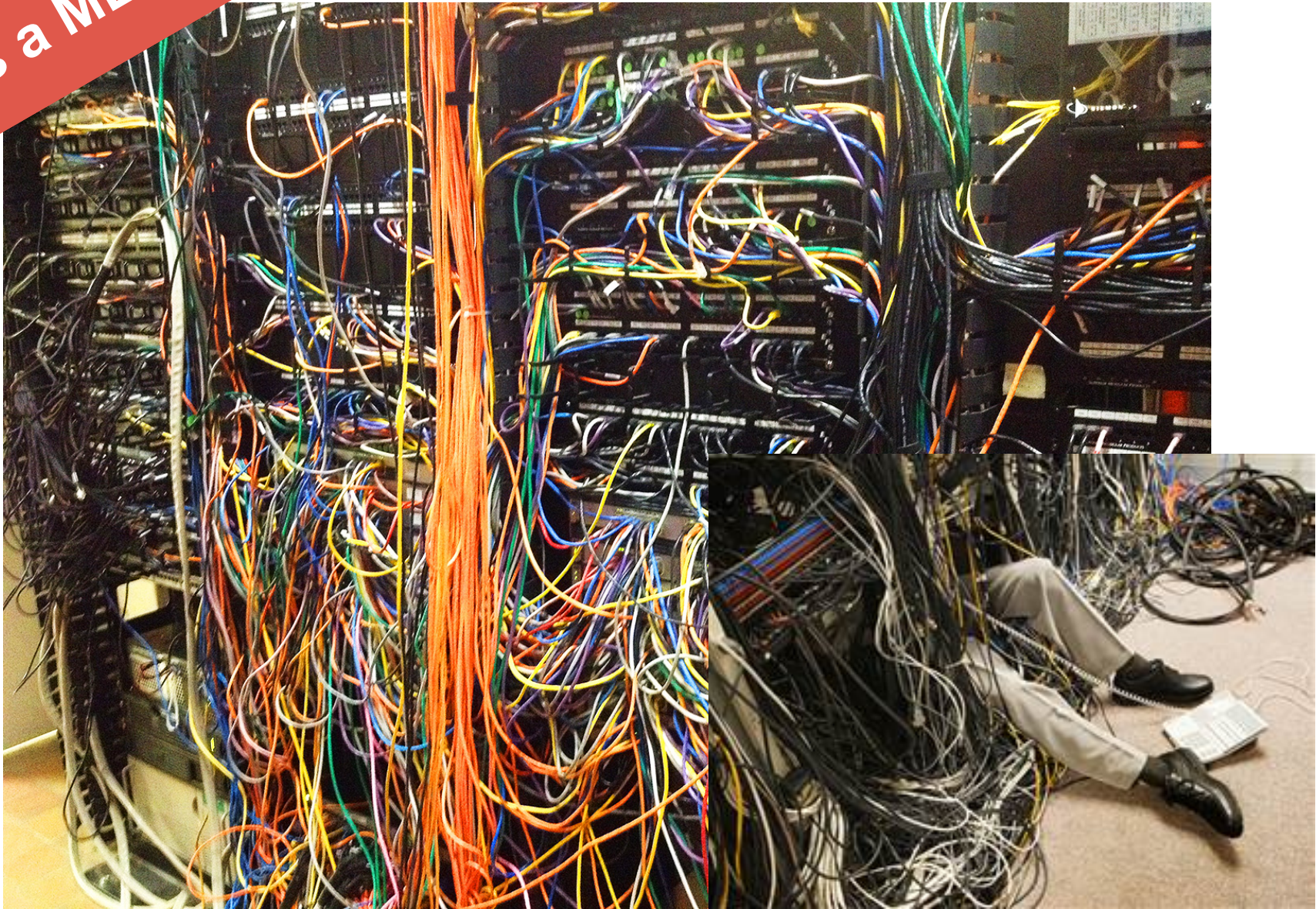


**DENIM**  
FOR ENGINEERING FOR SCIENCE

Open Engineering ?

19-21 September 2016  
European Spallation Source  
Lund, Sweden

It's a MESS !!!



# Utopia ?

## Benefits

- Reduced cost
  - Reduced risk
  - Better designs
- More and better instruments for our money
  - A stronger community



# Reality

## Not so easy

- IP property issues
  - Facility funding
  - Responsibilities
- 
- Cultural issues
  - Competition vs Collaboration



**Difficult ... But  
Not impossible**

## Areas where it works

- Instrument control software
- Simulation tools
- Interface Standardisation

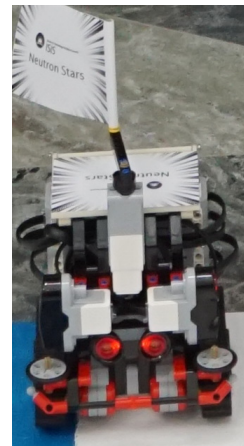
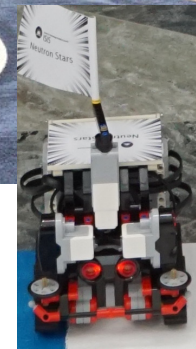
## • Places where it works

- CERN
- Open Source Software



# A way forward

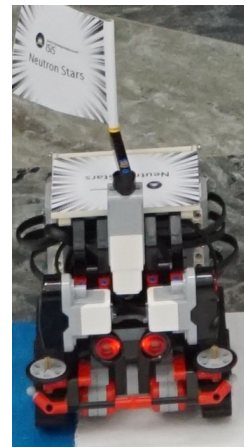
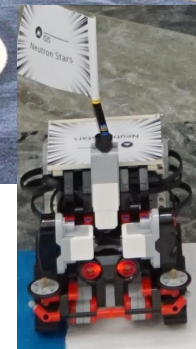
- Step by step
  - Low hanging fruit
  - Interfaces
  - Simple devices
  - Tools
  - Existing initiatives



A Way forward ...



- Step by step
  - Low hanging fruit
  - Interfaces
  - Simple devices
  - Tools
  - Existing initiatives



# Closing words



Utopia lies at the horizon. When I draw nearer by two steps, it retreats two steps. If I proceed ten steps forward, it swiftly slips ten steps ahead. No matter how far I go, I can never reach it. What, then, is the purpose of utopia? It is to cause us to advance.

(Eduardo Galeano)

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