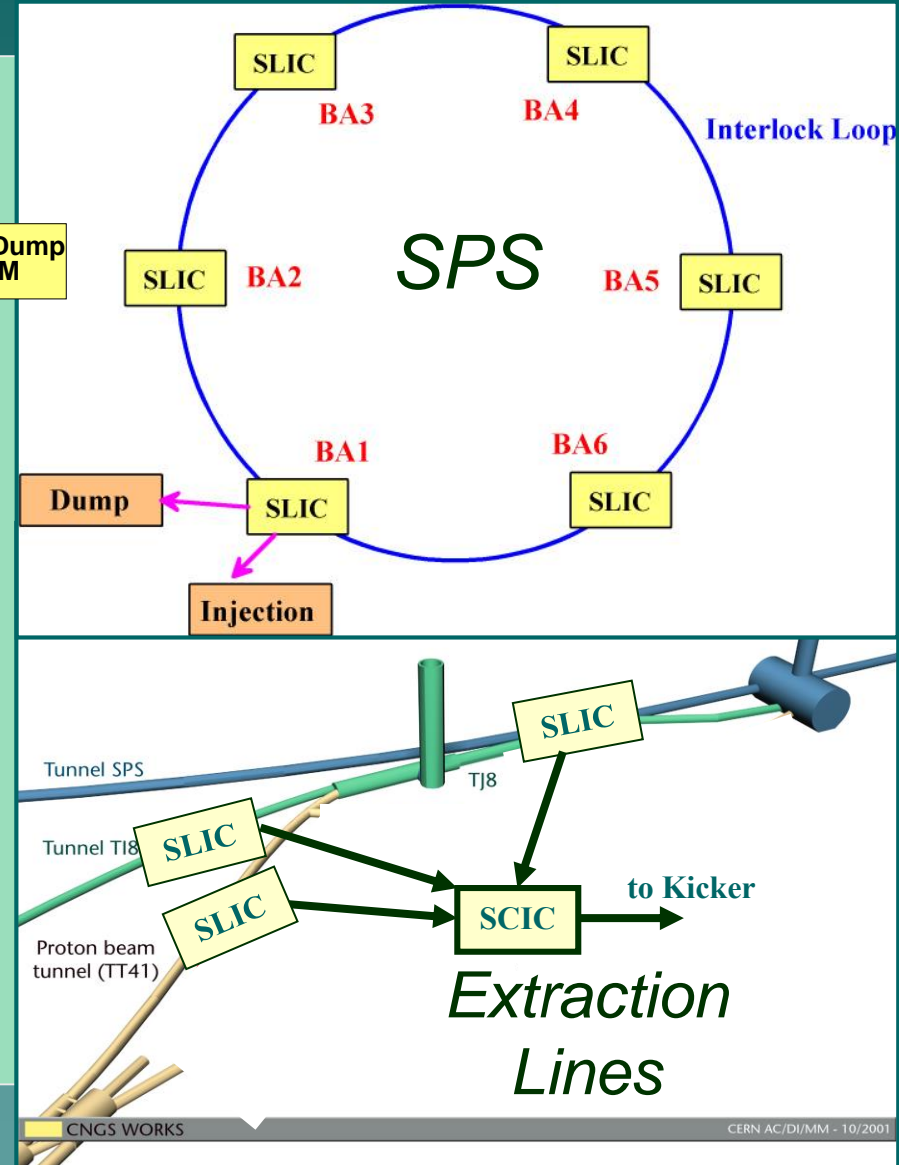
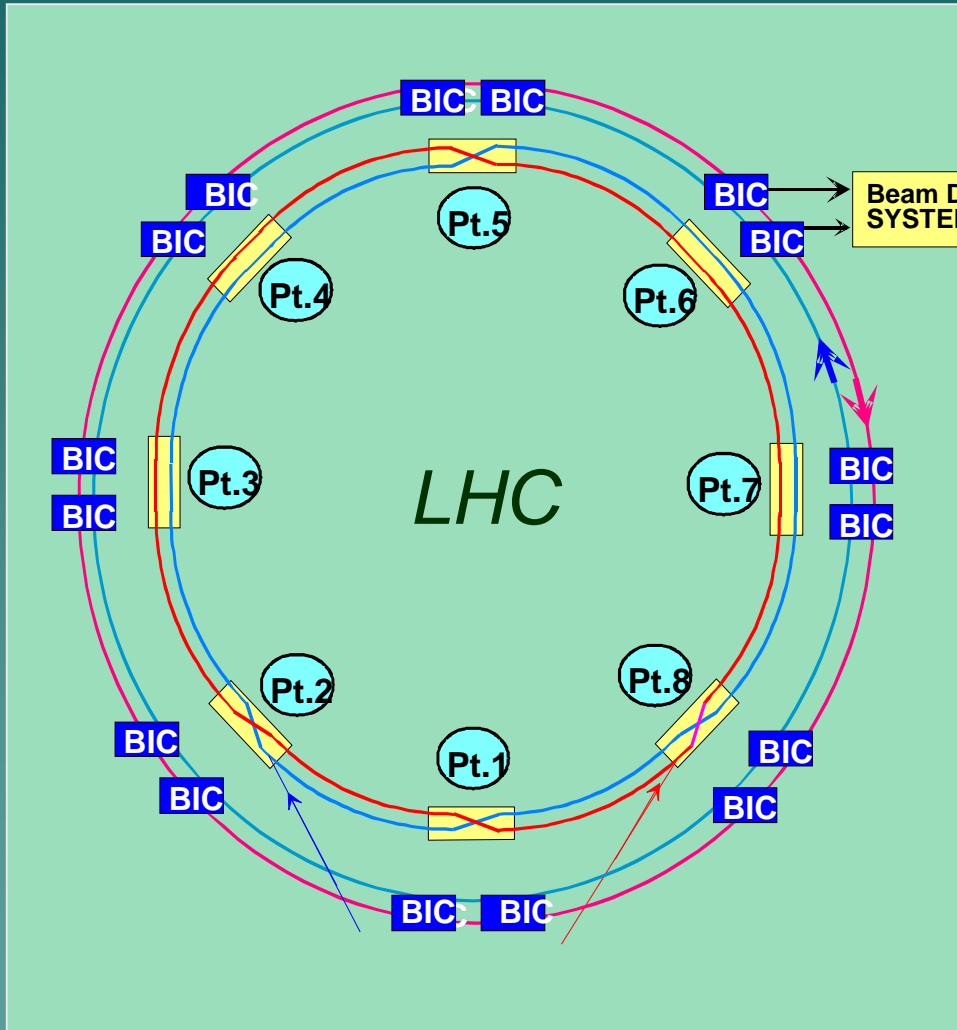
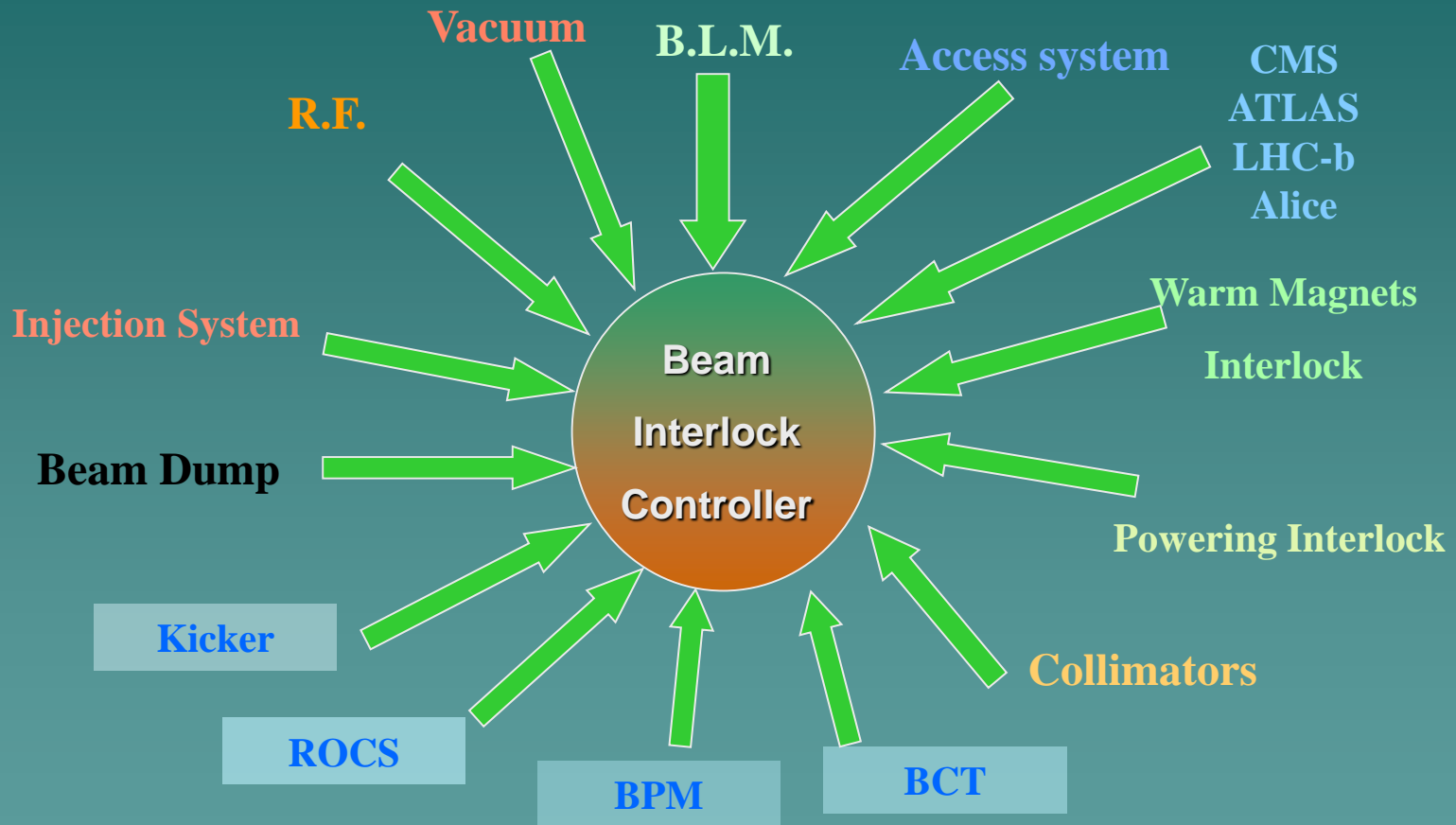


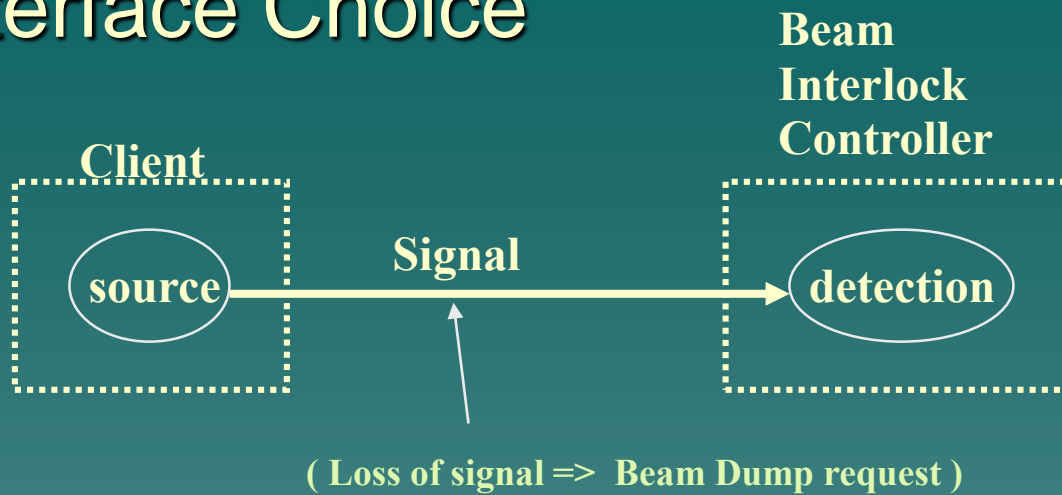
# Three Beam Interlock Systems



# to a Common Interface (?)



# Interface Choice



## Features:

- ◆ Reliable
- ◆ Fail-safe
- ◆ Fast
- ◆ Simple
- ◆ Standard

# Interface Choice



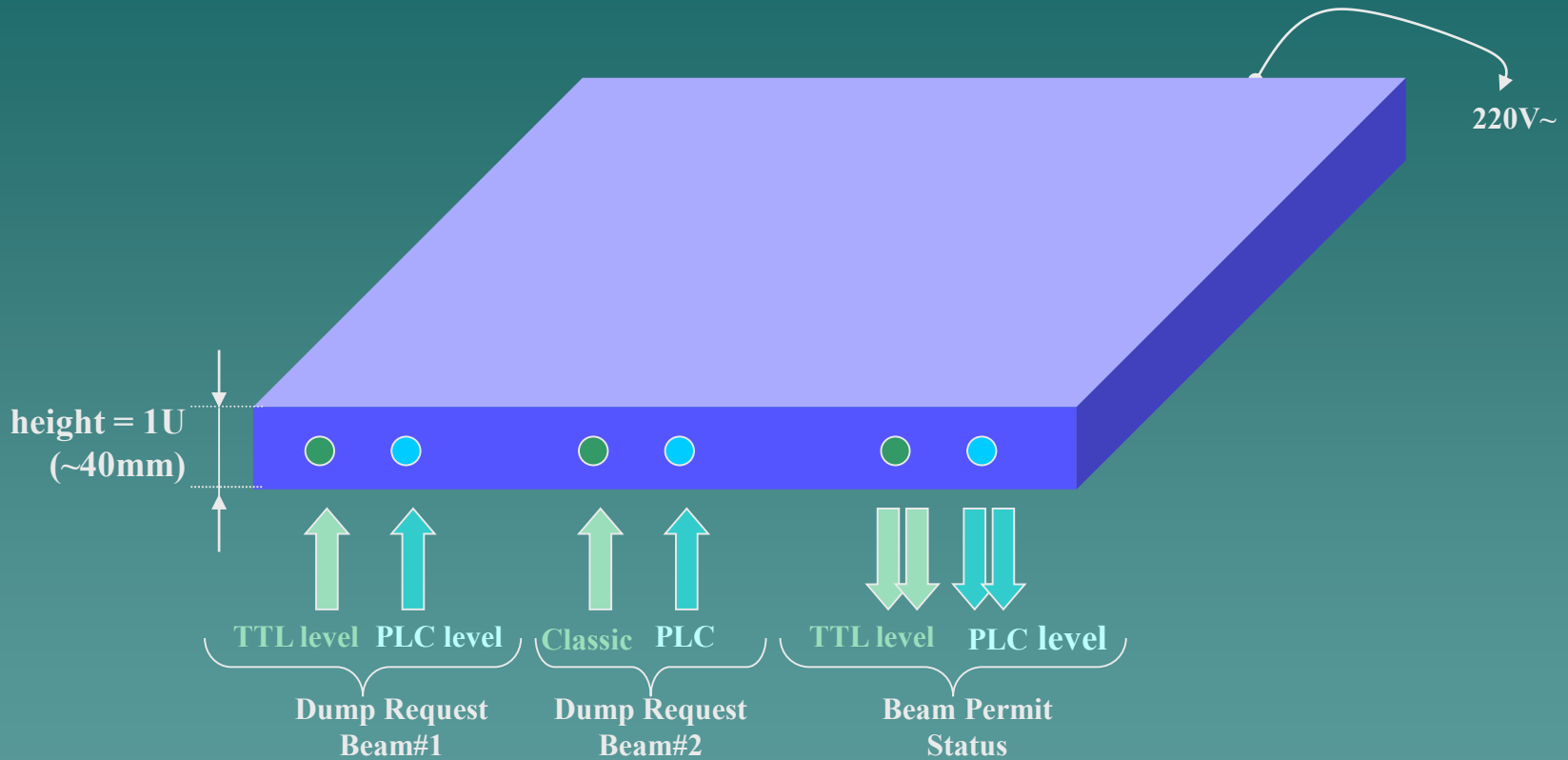
## Features:

- ◆ Reliable
- ◆ Fail-safe
- ◆ Fast
- ◆ Simple
- ◆ Standard

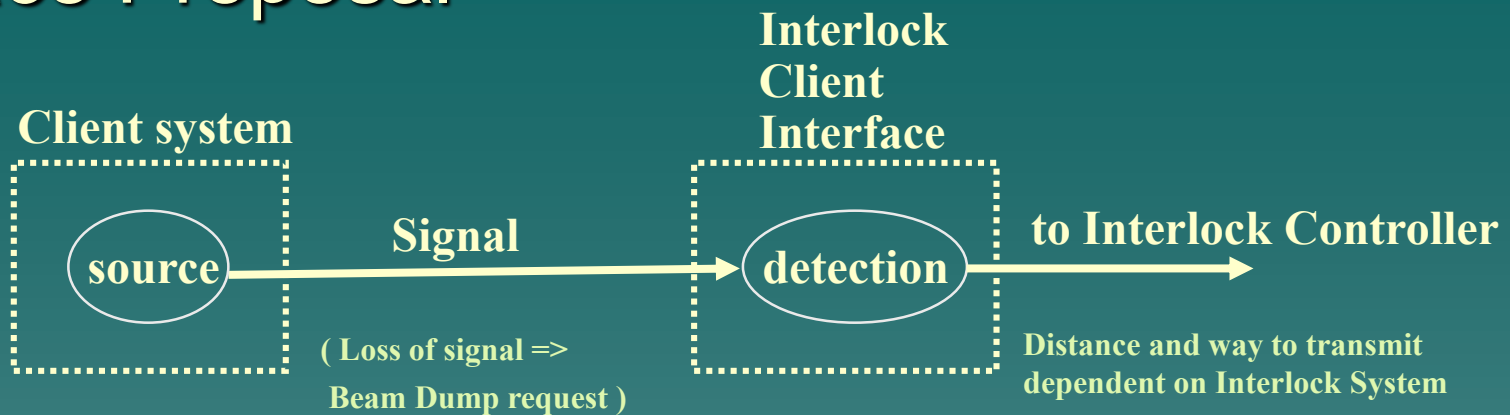
## Constraints:

- ◆ Various Electronics
- ◆ Client Hw already installed (or chosen)
- ◆ Distance Client/Interlock
- ◆ Signal's choice (current or freq, copper or fibres?)
- ◆ 2 beams: Individual or common request ?
- ◆ Possible chaining
- ◆ Beam Permit Status available to the users

# Interlock Client Interface



# Interface Proposal



	<i>PRO</i>	<i>CON</i>
Standard?	only one Interface Type for everyone and for 3 Beam interlock Systems	<b>needs 1Unit space in User rack</b> <b>needs the Mains 220V</b>
Simple?	Yes: if «Classic» Front-End => TTL level if «PLC» => +24Volts signal	
Fail-safe?	Yes: if power loss, if cable disconnected...	
Fast?	quite same...	<b>introducing a short delay</b>
Reliable?	has to be proven...	<b>additional electronic</b>