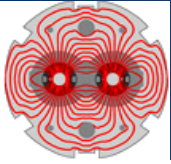
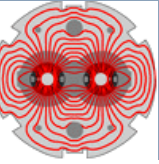


# SIS (un-)masking

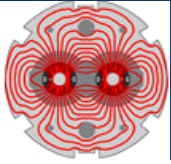
J. Wenninger



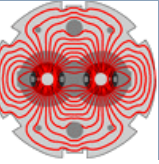
# Masks in SIS



- SIS tests may be configured to be **maskable** or **un-maskable**.
  - **Un-maskable is no longer used for individual tests**, it is limited interlock tree nodes. The reason is flexibility for commissioning, MD etc.
  - Un-maskable tests have been replaced by a mask category (next slide) with special SIS RBAC role.



# Mask categories



- One attribute of a SIS maskable test is the **mask category** – **4 categories** in total.
- So far 2 of the categories have been used:
  - **Default** and **LEVEL1** (restricted to experts).
- For Run 3 **LEVEL2** will be used for **MD specific SIS interlocks** (BBLR, crystals).
- The LHC sequencer has RBAC role 'LHC-EIC'.

Access Rules

Start typing a name

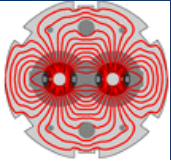
Actions shortcuts: User Roles Assign Role Admin Classes Assign Class Admin Add Access Rule Add Location

Access Rules Management

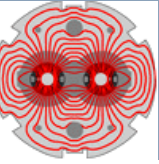
Search access rules

Basic DSL "Class name" like SIS\_PROTECTION and "Device group" = SIS\_PROTECTION\_LHC

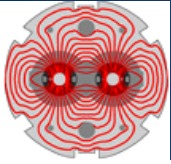
	Class Name <sup>▲</sup> <sub>1</sub>	Device Group <sup>▲</sup> <sub>2</sub>	Property Group <sup>▲</sup> <sub>3</sub>	Role <sup>▲</sup> <sub>4</sub>
i	SIS_PROTECTION	SIS_PROTECTION_LHC	GUI_LOGIN	
i	SIS_PROTECTION	SIS_PROTECTION_LHC	INIT	
i	SIS_PROTECTION	SIS_PROTECTION_LHC	LATCHING_DEFAULT	
i	SIS_PROTECTION	SIS_PROTECTION_LHC	LATCHING_LEVEL1	MCS-LHC-SIS-EXPERT
i	SIS_PROTECTION	SIS_PROTECTION_LHC	LATCHING_LEVEL2	
i	SIS_PROTECTION	SIS_PROTECTION_LHC	LATCHING_LEVEL3	
i	SIS_PROTECTION	SIS_PROTECTION_LHC	MASKING_DEFAULT	LHC-EIC
i	SIS_PROTECTION	SIS_PROTECTION_LHC	MASKING_DEFAULT	MCS-SIS
i	SIS_PROTECTION	SIS_PROTECTION_LHC	MASKING_LEVEL1	MCS-LHC-SIS-EXPERT
i	SIS_PROTECTION	SIS_PROTECTION_LHC	MASKING_LEVEL2	LHC-EIC
i	SIS_PROTECTION	SIS_PROTECTION_LHC	MASKING_LEVEL2	MCS-LHC-SIS
i	SIS_PROTECTION	SIS_PROTECTION_LHC	MASKING_LEVEL3	



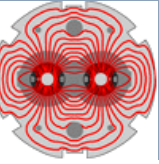
# SIS test TAGs



- Each SIS test can be associated to a number of **pre-defined TAGs**.
  - Current tags are : ‘ORBIT’, ‘INJ1’, ‘INJ2’, ‘POWERING’ etc
- A SIS test may be associated to more than one tag, for example ‘ORBIT’ and ‘INJ1’.
- The interest of TAGs is that the **standard operations** (MASK, UNMASK, UNLATCH) may **be applied to a TAG**, i.e. to all tests associated to the TAG.
  - Eg mask all ‘INJ1’ tests for commissioning of injection beam1 etc.



# MD (un-)masking



- By combining a **mask category for MD specific tests** (BBLR, crystals ...) and a **'MD' TAG for tests that are frequently masked in MD** (for example related to ORBIT) one can setup a sequencer task that will automatically un-mask all those tests (category MD and TAG 'MD').