



# Workshop on Machine Protection, focusing on Linear Accelerator complexes : 6th - 8th June, 2012

14:00 **Machine protection and operational availability, issues and solutions 20'**

Speaker: Mr. Rudiger Schmidt (CERN)

14:20 **Beam loss mechanisms 20'**


Speaker: Daniel Schulte (CERN)

14:40 **Failure onset detection 20'**

Speaker: Dr. Hermann Schmickler (CERN)

15:00 **Failure mitigation 20'**

Speaker: Michael Jonker (CERN)

Material: [Slides](#) 

15:20 **Operational aspects 20'**

Speaker: Marc Ross (Fermilab)

Some final words:

- Impression and what next
- Thanks



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## Workshop Objectives:

- Bring together experts working on machine protection systems for accelerator facilities with high brilliance or large stored beam energies, with the main focus on linear accelerators and their injectors.
- Establish a coherent view of failure modes and consequences for linear accelerators.
- Review the current state of the art in machine protection systems.
- The participants will benefit from the experience of colleagues who have designed, commissioned and operated such systems.
- The workshop will provide input to the design of machine protection systems at future accelerators, in particular for CLIC and ILC.
- It also should promote synergies in the development of protection systems at different accelerators.



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### Impressions:

Very useful exchange of ideas and experiences from machines at the design, commissioning and operation stages

- In particular there are many recent experiences from LHC that tell us about foreseen and unforeseen problems
- Very interesting to see how machine protection issues feed into the design (or not) and operation

Secondly, a very useful gathering of people from many machines with special expertise in this field (and related fields)



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Next steps:

Another workshop – timing to be decided. In a few years various machines will have significant new experiences (in design or operation)

- for example when LHC is in full flow at 13-14 TeV
- or earlier for other machines

Personal contacts – using the connection initiated and developed in this workshop, possibly a network type of interaction

Ideas or comments



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Thanks:

- To all participants
- All speakers
- To the initiators (Michael and Rudiger)
- And to Shauna who made it all work
- ... finally the BBQ team



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