

ARW workshop forum



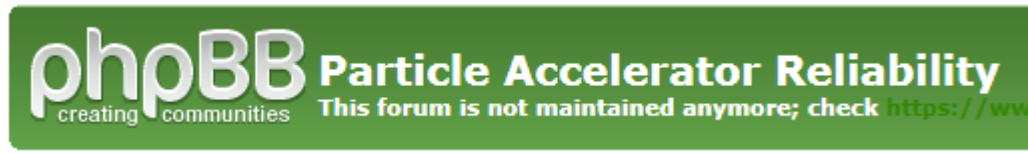
History

- ARW2002 Grenoble
 - No forum during this 7yr gap...Communication via adhoc emails
- ARW2009 Vancouver
- ARW2011 South Africa
- ARW2013 Australia
- ARW2015 Oakridge
 - Requirement for email notification
 - Drilling too deep with problems
 - Moderator
 - Question to the world
 - WAO ARW update breakout session
 - Email lists
- ARW2017 Versailles





<https://www.accelerator-reliability.org/>



- phpBB bulletin board open source
- Started 2008 (RG, AL, TM), 49 members
- Visible to the world
- 5 active users...last visit Nov 15
- Register and sign in to use

MOST ACTIVE TOPIC STARTERS

Admin	██████████
TonyMowbray	██████████
hardy	██████████
Cherrill Spencer	██████████
AndreasLuedeke	██████████
georgedodson	██████████
Violeta	██████████
JulianBrower	██████████
lafky	██████████
vderench	██████████

MOST ACTIVE TOPICS

Apathy Reigns Supreme!
Hello and a suggestion
Profile Completion
Software for reliability predictions / maintainability / RAMI. What do you use ?
New and Improved Forum
How do you inform your Users about on-going operations status and issues.
Water Cooling Systems
Link to the ARW 2009 workshop
ARW DATES 2011 are known !
Asset and Maintenance Management Workshop AMMW2015 at DESY, Oct 12-14 2015

MOST VIEWED TOPICS

ARW subtopics
New and Improved Forum
WAO 2010 in KOREA
Water Cooling Systems
ELOG by Stefan Ritt
ARW 2015 dates
Asset and Maintenance Management Workshop AMMW2015 at DESY, Oct 12-14 2015
New survey regarding improving magnet reliability to be sent out soon
Profile Completion
Apathy Reigns Supreme!



Timeline for confluence

- Enric and Annika to set up system at ESS in Altassian Confluence
- 6 initial setup team, RG, KB, JB, AN, EB, DM
- Post some questions to initial 6
- Respond to questions and feedback about format
- Open to the wider community of 20 people
- Open to full ARW community



Marketplace



Document collaboration



Requirements

- Visibility
- Security
- Accessibility
- Moderation
- Themed sections
- **Email notification**
- Repository for documentation

Issues and Opportunities

- Email addresses on lists
- Not knowing of a posting
- Presenting issues in public
- Lessons learn vs forum



Accelerator Reliability Community

Created by Enric Bargalló, last modified less than a minute ago

i The Accelerator Reliability Community confluence space is a platform to discuss and to exchange information about reliability of principal systems. It is also a place to find information about reliability theory and analyses done at several facilities.

Equipment

- > Sources
- > Normal-conducting Cavities
- > Superconducting Cavities and Cryomodules
- > Magnets
- > Radio Frequency
- > Power converters
- > Control and protection
- > Vacuum
- > Water cooling
- > Cryogenics
- > Beam instrumentation

Theory

- Terms and definitions
- Reliability theory

Analysis

- Examples of analyses
- Human Reliability analyses
- Methodologies and tools

Other

- Unplaced material

Community

- Operation data of existing facilities
- Facilities and contact people
- Workshops, Schools and Courses
- Secret discussions
- Questions to the community

Recently added topics

Title	Crea...	Modi...
RF window - Couplers	Enric ...	Oct 1...
Wire scanners	Enric ...	Aug 1...
Redundancy Strategies	Riccar...	Jun 1...
Testing - During and Before O...	Riccar...	Jun 1...

[Find more results](#)

How to use this space

There are two main ways of using and contributing to this space:

Uploading information and editing parts of this space:

- It can be done by any user
- If you don't know how to do it or where to put the information contact the moderator of the section or one of the administrators

Starting discussions

- Discussions can be done in the same page:
 - as comments at the end of the page "link on how to",
 - or as an inline comment "link on how to".
- You can also ask the community in the page [Questions to the community](#).
- Or you can create a new space in which you can choose who can see it in the section [Secret discussions](#).

When the discussion is closed or there is enough information to make it public you can upload the conclusions in a page.

New users

To use this platform you need to be a user. To do so fill in the form that you will be shown after pressing the button below.

? Unknown Attachment

Who can become member?

Roles

- **User:** any person with access to the space
- **Moderator:** the person responsible to organize the information in one section of the space
- **Administrator:** person responsible of the whole organization of the space

The people with administrator and moderator roles are listed in [Facilities and contact people](#).

Principal features

- **Watching:** it is a way to receive notifications when someone is editing or commenting in a page you are interested in. If you create a page that you think will be interesting for someone you can make them watchers of the page.
- **Page restrictions:** you can decide who can see a page you are creating. It can be:
 - public (even for people without a user account)
 - restricted to users only
 - restricted to some groups of people
 - restricted to a few selected people
 - It is also possible to select what a user can do (view, edit, delete, etc.).

Machine Protection

Created by Riccard Andersson, last modified on Aug 04, 2015

i This section has four parts. First, there is an introduction to the machine protection concept and clarification of what should be included in the discussion. The second part contains web resources that are quickly accessible and give a general idea of machine protection. The third part can be viewed as the most important part and lists the topics that are discussed related to machine protection and reliability. This part should be filled continuously, both with new topics and extended within each topic as this Accelerator Reliability Confluence page is maturing. Lastly, the fourth part will include all uploaded files in this section, including pictures and documents. There is a drag-and-drop feature that can be easily used to add files. Note, however, that it is preferred to link to these files in their respective place of reference and that the part 4 only collects them in one place.

On the right, there is a link to [ask a question](#) related to this section to the community. Please use it to make the discussions more alive and public for sharing ideas and information. A bit further down on the right, there is a button for creating new topics to part 3. When doing this, you will start to fill in information using a pre-made template. Please use this structure as far as possible for efficiency and clarity.

1. Introduction

1.1 Machine Protection - A Strategy

Many new accelerator facilities face high demands on reliability and availability, at the same time as beam energies and beam powers are higher than what has been achieved before. This combination is far from straight-forward, and requires a well thought-through machine protection *strategy* to succeed. As machine protection has left the era of only being one "system" (the commonly used term MPS), this section rather treats the strategy to successfully protect the machine. A rough idea for what is included in machine protection for ESS is seen in Fig. 1 (with the omission of more abstract but important aspects such as maintenance plans, redundancy strategies and tests). Please add new topics and fill this section with more information as we go along.

The key aspect in optimizing availability and reliability is of course cutting out the major contributors of beam trips and downtime. A missed emergency beam stop would cause damage and potentially long downtime. On the other hand, repeatedly stopping beam erroneously also contributes to downtime and should be avoided. Hence, the optimization work must aim for a delicate line between the two extremes (stopping too rarely and stopping too often) with the result being continuous and fault free operation.



If you have any questions concerning machine protection, please ask it to the community here:

[Questions to the community](#)

Machine Protection Topics

- [Beam Interlock Systems](#)
- [Beam Loss Monitors](#)
- [Interlocking Equipment](#)
- [Maintenance for Machine Protection](#)
- [Redundancy Strategies](#)
- [Selecting Components](#)
- [Testing - During and Before Operation](#)

Please add more topics in this section:

[Create a new topic](#)

The **moderator of this space** is

[@Riccard Andersson](#). If you have any suggestion or comment please contact him or just add a comment in this page.

Questions to the community

Created by [Enric Bargalló](#), last modified less than a minute ago

This page collects all questions asked by the community.

When a question is satisfactory answered, the state has to be changed from Open to Closed.

Do you have a question to the community?

[Ask a question](#)

Title	Creator	Modified
Is there a list / database / page / wiki of all accelerators worldwide?	Benjamin Todd	2 minutes ago
Is atlassian the appropriate tool?	Enric Bargalló	3 minutes ago
Forum Requirements - Discussion	Benjamin Todd	Sep 18, 2015
Is this working?	Enric Bargalló	Jun 10, 2015

Secret discussions

Created by Enric Bargalló, last modified on Oct 13, 2017

The goal of this section is to have discussions privately with some users. You can choose who can see the discussion and who can't.

Make sure you change the restrictions to your page before starting the discussion! You can do in the locker symbol (in the line before the title of the page you are creating). The locker symbol should change from grey (open) to red (closed). You can choose in there the people you give access to see the page, no one else will have access to it. When the discussion is done you can delete the page. If you think that part of the discussion can be useful for other users, please add it in the corresponding section and topic. A discussion can include the posting/linking of relevant documentation as well.

New "secret" discussion

Your secret discussions

- [Annika can't see this!](#)
- [Reliability prediction software for older machines](#)
- [Running your accelerator at reduced energy](#)
- [test secret discussion](#)

Workshops, Schools and Courses

Created by Enric Bargalló, last modified by Rossano Giachino on Aug 02, 2016

Workshops

Accelerators

Accelerator Reliability Workshop (ARW) - <http://neutrons2.ornl.gov/conf/arw2015/>

Accelerator Reliability Workshop (ARW) - <http://www.synchrotron-soleil.fr/Workshops/2017/ARW-2017>

Workshop on Accelerator Operations (WAO) - <http://wao2014.desy.de/>

Workshop on Accelerator Operations (WAO) - <http://wao2016.csp.escience.cn/dct/page/1>

Workshop on Machine Protection, focusing on Linear Accelerator complexes - <https://indico.cern.ch/event/185561/>

STAMP and Others

Asset and Maintenance Management Workshop (AMMW) - <https://indico.desy.de/conferenceDisplay.py?ovw=True&confId=12223>

3RD EUROPEAN STAMP WORKSHOP, Amsterdam University: <http://www.amsterdamuas.com/car-technology/about-the-centre-of-applied-research/calendar/calendar/calendar/content/folder/workshops/2015/10/3rd-european-stamp-workshop.html>

Fourth STAMP Workshop, MIT: <http://psas.scripts.mit.edu/home/stpa2015/>

Schools

Joint Accelerator School on Beam Loss and Accelerator Protection <http://uspas.fnal.gov/materials/14JAS/JAS14-lectures.shtml>

Courses

Risk Analysis and Decision Making course, USPAS 2016: <http://uspas.fnal.gov/programs/2016/austin/courses/risk-analysis.shtml>