Talks – Discussion – Ask the Experts
Collaboration of CERN and IMA

Initiated by a severe machine failure of the LHC in 2008, engineers at CERN looked for suitable measures to increase both machine reliability and availability while maintaining high personnel safety.

The Institute of Machine Components (IMA) has obtained substantial expertise in the field of reliability engineering through its long history of research. This knowledge led to the initial cooperation between CERN and IMA which has now lasted for over a decade.

Since then, reliability processes and several tools tailored to CERN’s needs have been developed and implemented at CERN. The joint research of CERN and IMA resulted in various scientific findings, publications, and doctorates. The collaboration also enables scientific staff and students to work on cutting-edge research projects both at CERN and IMA.

Join us for the first event of the Engineering Science Series, hosted by IMA, featuring experts from CERN and IMA. Explore the world of reliable particle accelerators at CERN through insightful talks by speakers with diverse backgrounds.

Be part of the event – join the conversation, expand your knowledge, and make valuable connections!

More information
www ima uni-stuttgart de/ES1

University of Stuttgart
Institute of Machine Components

Program
Wednesday, 20.03.2024

9:15 Introduction
Dr. Martin Dazer
Head of Reliability Department, IMA
Dr. Jan Uythoven
Group Leader, CERN
Prof. Andreas Nicola
Head of Institute, IMA

9:40 Impact of Reliability in Product Design & Operation - The Key to manage uncertainties in highly complex machines
Dr. Martin Dazer
Head of Reliability Department, IMA

10:00 The importance of availability and reliability for particle accelerators
Dr. Jan Uythoven
Group Leader, CERN

10:30 Reliability tools and methods used at CERN
Dr. Lukas Felsberger
Reliability Engineer, CERN

11:00 Ask the Experts
Snacks and Drinks will be provided

11:45 A safety and reliability perspective on the CERN RadiatiOn Monitoring Electronics (CROME)
Dr. Hamza Boukabache
Project Leader, CERN

12:15 Predicting electronic failures for enhanced accelerator availability
Felix Waldhauser
Doctoral Student, IMA and CERN

12:35 Opportunities to work with and at CERN
Dr. Martin Dazer
Head of Reliability Department, IMA
Dr. Jan Uythoven
Group Leader, CERN
Dr. Hamza Boukabache
Project Leader, CERN

Snacks and Drinks will be provided

Impact of Reliability in Product Design & Operation - The Key to manage uncertainties in highly complex machines

Predicting electronic failures for enhanced accelerator availability

Opportunities to work with and at CERN

Ask the Experts

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SITE PLAN

Lecture hall V 47.03
University Campus Vaihingen

Image source: CERN