

Session Program

9-13 Apr 2018



FCC Week 2018

Special Technologies

Beurs van Berlage
Damrak 243, 1012 ZJ Amsterdam, Netherlands

Tuesday 10 April

08:30

Special Technologies: Beam vacuum system conceptual design I (review)

Session | Location: 1.20, P5 Veilingzaal | Convener: Paolo Chiggiato

08:30-08:50 **FCC-hh beam vacuum concept (I): BS design, tests and feasibility**

Speaker

Francis Perez

08:50-09:10

Results on the FCC-hh Beam Screen prototype at the KIT electron storage ring.

Speaker

Luis Antonio Gonzalez Gomez

09:10-09:30

FCC-ee beam vacuum concept: the bean pipe of FCC-ee

Speaker

Roberto Kersevan

09:30-09:50

Beam Screen surface characterisation for high energy beams: test results at Frascati.

Speaker

Roberto Cimino

10:00

10:30

Special Technologies: Beam Vacuum System Conceptual Design II (review)

Session | Location: 1.20, P5 Veilingzaal | Convener: Francis Perez

10:30-10:45 **HTS YBaCuO Coated Conductors for the FCC-hh beam screens**

Speaker

Joffre Gutierrez

10:45-11:00

HTS TI-based coatings for the FCC-hh beam screens

Speaker

Alessandro Leveratto

11:00-11:20

NEG Coatings and laser surface engineering (LASE) electron cloud mitigation techniques

Speaker

Dr Oleg Malyshev

11:20-11:40

Shape memory alloys for remote connection of beam pipes in radioactive areas

Speaker

Cedric Garion

11:40-12:00

Strategies for efficient He trapping

12:00

Speaker

Raffaele G. Agostino

Wednesday 11 April

08:30

Special Technologies: Injection & extraction I

Session | Location: 1.20, P5 Veilingzaal | Convener: Peter Levai

08:30–08:50 **Superconducting Shield (SuShi) septum - towards a full prototype**

Speaker

Dr Daniel Barna

08:50–09:10 **High field normal conducting massless septa for FCC beam transfer**

Speaker

Alejandro Sanz Ull

09:10–09:30 **Status of truncated cosine-theta septum magnet study**

Speaker

Kei SUGITA

09:30–09:50 **Marx prototype pulse generator design and initial results**

Speaker

Mike Barnes

10:00

10:30

Special Technologies: Injection & extraction II

Session | Location: 1.20, P5 Veilingzaal | Convener: Ursula Helga Van Rienen

10:30–10:50 **FCC kicker magnet design, impedance and heating aspects**

Speaker

Mike Barnes

10:50–11:10 **Laser triggering of thyristor switches**

Speaker

Nicolas Magnin

11:10–11:30 **Inductive adder prototype pulse generator for FCC-hh kickers**

Speaker

David Woog

11:30–11:50

Development of experimental and theoretical investigations in NRC “Kurchatov Institute” of fast particle irradiation effects on radiation resistance of new collimator and superconductor materials for magnet oriented on the Future Circular Collider (FCC).

Speaker

Alexander Ryazanov

12:00

Thursday 12 April

08:30

Special Technologies: Beam stoppers, collimators and dumps (review)

Session | Location: 1.1, P3 Administratiezaal | Convener: Brennan Goddard

08:30–08:50 **Improved Concept of HE-LHC Beam Dump**

Speaker

Armen Apyan

08:50–09:10 **FCC-hh beam dump extraction and dilution kicker systems**

Speaker

Elisabeth Renner

09:10–09:30 **Dilution requirements for the FCC-hh dump**

Speaker

Anton Lechner

10:00

10:30

Special Technologies: Electronics & instrumentation (review)

Session | Location: 1.1, P3 Administratiezaal | Convener: Federico Ravotti

10:30–10:48 **Radiation environment assessment in the FCChh and FCCee machines**

Speaker

Angelo Infantino

10:48–11:06 **Overview of radiation hardness assurance studies for FCC**

Speaker

Ruben Garcia Alia

11:06–11:24 **Overview of the dose response in CMOS technology**

Speaker

Giulio Borghello

11:24–11:42

Dosimetry for ultra-high particle fluence and challenges for irradiation experiments at FCC radiation levels

Speaker

Georgi Gorine

11:42–12:00 **R&D on new concepts for beam instrumentation**

Speaker

Federico Roncarolo

12:00

13:30

Special Technologies: Development of new manufacturing technologies

Session | Location: 1.1, P3 Administratiezaal | Convener: Said Atieh

13:30–13:50 **Cold plasma spray additive manufacturing**

Speaker

Cedric Garion

13:50-14:10 **Additive manufacturing in-situ repair solutions for the FCC**

Speaker

Toms Torims

14:10-14:30 **Robotics inspections, maintenance and early intervention for the FCC**

Speaker

Mario Di Castro

14:30-14:50 **Development of technologies for new cryoplant concepts**

Speaker

Francois Millet

15:00

15:30

Special Technologies: Machine protection, circuit and powering

Session | **Location:** 1.1, P3 Administratiezaal | **Convener:** Jan Uythoven

15:30-15:50 **Circuit layout and protection**

Speaker

Marco Prioli

15:50-16:05 **Quench detection System for the FCC era**

Speaker

Tomasz Podzorny

16:05-16:20

Proposal on a novel energy extraction system for superconducting magnet chains

Speaker

Vasilios Karaventzas

16:20-16:40 **Beam Impact & Machine Protection challenges**

Speaker

Yuancun Nie

16:40-17:00 **FCC Powering concepts**

Speaker

Francisco Rafael Blaquez Delgado

17:00