

Session Program

16-19 May 2022

**International Workshop on Breakdown
Science and High Gradient Technology
(HG2022)**

Poster Session

Monday 16 May

14:30

Poster Session: File Upload

Session

14:30-14:40

High temperature superconductor-based RF cavity development high power test

Speakers

Jessica Golm, Mitch Schneider

14:30-14:40

Status and plans of the new XBand laboratory for accelerators and beams, X-LAB

Speakers

Matteo Volpi, Matteo Volpi

14:30-14:40

Design and Prototyping of high-gradient Ka-band accelerating structures

Speakers

Bruno Spataro, Luigi Faillace

14:30-14:40

SEY reduction and assembly techniques of dielectric accelerating structure applications

Speaker

Alexej Grudiev

14:30-14:40

Wakefield Damping of a Distributed Coupling LINAC for CLIC

Speaker

Evan James Ericson

15:00

18:55

Poster Session: Poster MON

Session

18:55-19:35

SEY reduction and assembly techniques of dielectric accelerating structure applications

Speaker

Alexej Grudiev

18:55-19:35

Design and Prototyping of high-gradient Ka-band accelerating structures

Speakers

Bruno Spataro, Luigi Faillace

18:55-19:35

Status and plans of the new XBand laboratory for accelerators and beams, X-LAB

Speakers

Matteo Volpi, Matteo Volpi

18:55-19:35

High temperature superconductor-based RF cavity development high power test

Speakers

Jessica Golm, Mitch Schneider

18:55-19:35

Wakefield Damping of a Distributed Coupling LINAC for CLIC

Speaker

Evan James Ericson

19:35

Tuesday 17 May

14:30

Poster Session: File Upload / Asian Session Session

14:30–14:40 **Results and observations from high-gradient photoinjector testing**

Speaker

Louise Cowie

14:30–15:00 **Design of disk-loaded traveling wave structure for the muon linac**

Speaker

Kazumichi Sumi

14:30–15:00 **Breakdown study on an X-band RF gun**

Speaker

Liuyuan Zhou

14:30–15:00 **Parallel Feed structures**

Speaker

Yuliang Jiang

14:30–14:40 **Development of X-band high gradient structures and CuAg alloys**

Speaker

Bruno Spataro

14:30–14:40 **High-Field Studies in the Linac4 RFQ at CERN**

Speaker

Lee Millar

14:30–14:40 **Design and test of a short pulse X-band deflector**

Speakers

Chunguang Jing, Chunguang Jing, Chunguang Jing

15:00

18:50

Poster Session: Poster TUE-2 Session

18:55–19:30 **Parallel Feed structures**

Speaker

Yuliang Jiang

18:55–19:30 **Breakdown study on an X-band RF gun**

Speaker

Liuyuan Zhou

18:55–19:30 **Design of disk-loaded traveling wave structure for the muon linac**

Speaker

Kazumichi Sumi

18:55–19:30 **Results and observations from high-gradient photoinjector testing**

Speaker
Louise Cowie

18:55-19:30 **Design and test of a short pulse X-band deflector**

Speakers
Chunguang Jing, Chunguang Jing, Chunguang Jing

18:55-19:30 **Development of X-band high gradient structures and CuAg alloys**

Speaker
Bruno Spataro

18:55-19:30 **High-Field Studies in the Linac4 RFQ at CERN**

Speaker
Lee Millar

19:30

Wednesday 18 May

14:30

Poster Session: File Upload / Asian Session Session

14:30-14:40

Applying Machine Learning to Breakdown Prediction in High-Gradient RF Cavities

Speakers

Christoph Obermair, Lee Millar

14:30-15:00

Bveri activities on MBK RF source

Speaker

Zhizhi Wan

14:30-15:00

Recent Developments in X-band Klystrons at CETD

Speaker

Toshiyasu Higo

14:30-14:40

Field enhancement sharpening mechanism via biased surface diffusion

Speaker

Jyri Kimari

14:30-14:40

Cathode versus Anode Breakdown Features in Cryogenic Conditioning

Speakers

Iaroslava Profatilova, Marek Jacewicz

14:30-14:40

Atomistic modeling of the coupling between electric field and bulk plastic deformation

Speaker

Soumendu Bagchi

14:30-14:40

Comparative material study of breakdown threshold and robustness to low-energy proton irradiation

Speakers

Catarina Serafim, Ruth Peacock

15:00

18:50

Poster Session: Poster WED-2 Session

18:50-19:30

Applying Machine Learning to Breakdown Prediction in High-Gradient RF Cavities

Speakers

Christoph Obermair, Lee Millar

18:50-19:30

Field enhancement sharpening mechanism via biased surface diffusion

Speaker
Jyri Kimari

18:50–19:30 **Cathode versus Anode Breakdown Features in Cryogenic Conditioning**

Speakers
Iaroslava Profatilova, Iaroslava Profatilova, Marek Jacewicz

18:50–19:30

Atomistic modeling of the coupling between electric field and bulk plastic deformation

Speaker
Soumendu Bagchi

18:50–19:30

Comparative material study of breakdown threshold and robustness to low-energy proton irradiation

Speakers
Catarina Serafim, Ruth Peacock

18:50–19:30 **Bveri activities on MBK RF source**

Speaker
Zhizhi Wan

18:50–19:30 **Recent Developments in X-band Klystrons at CETD**

Speaker
Toshiyasu Higo

19:30

Thursday 19 May

14:30

Poster Session: File Upload Session

14:30-14:40

Copropagating schemes for highgradient Dielectric Laser Accelerators (DLAs)

Speaker

Giuseppe Torrisi

14:30-14:40

Modulator

Speaker

Bas Eikelboom

14:30-14:40

VDL Machining

Speaker

Paul Blom

14:30-14:40

Simulation Design of Multicell DDA Structure

Speaker

Sarah Weatherly

15:00

19:00

Poster Session: Poster THU-2 Session

19:00-19:40

Copropagating schemes for highgradient Dielectric Laser Accelerators (DLAs)

Speaker

Giuseppe Torrisi

19:00-19:40

Simulation Design of Multicell DDA Structure

Speaker

Sarah Weatherly

19:00-19:40

Modulator

Speaker

Bas Eikelboom

19:00-19:40

VDL Machining

Speaker

Paul Blom

19:40