

ARIES Workshop on Energy Efficient RF



Report of Contributions

Contribution ID: 0

Type: **not specified**

Practical information

Tuesday, 18 June 2019 13:20 (5 minutes)

Presenter: RUBER, Roger (Uppsala University)

Session Classification: Opening and Introduction Energy Efficiency

Contribution ID: 1

Type: **not specified**

Welcome

Tuesday, 18 June 2019 13:15 (5 minutes)

Presenter: KARIS, Olof (U)

Session Classification: Opening and Introduction Energy Efficiency

Contribution ID: 2

Type: **not specified**

Increased demand for high efficiency RF power sources

Tuesday, 18 June 2019 13:45 (25 minutes)

Presenter: Dr JENSEN, Erk (CERN)

Session Classification: Opening and Introduction Energy Efficiency

Contribution ID: 3

Type: **not specified**

Overview high efficiency klystron efforts

Tuesday, 18 June 2019 14:15 (25 minutes)

Primary author: SYRATCHEV, Igor (CERN)

Presenters: SYRATCHEV, Igor (CERN); CAI, Jinchi (CERN)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 4

Type: **not specified**

Design high efficiency X-band klystron at CERN

Tuesday, 18 June 2019 14:45 (25 minutes)

Presenter: CAI, Jinchi (CERN)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 5

Type: **not specified**

High efficiency klystron at CEA

Tuesday, 18 June 2019 16:30 (25 minutes)

Summary

Presenter: HAMEL, Pierrick (CEA Saclay)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 6

Type: **not specified**

Software tools for klystron design optimization

Tuesday, 18 June 2019 17:00 (25 minutes)

Presenter: PLOUIN, Juliette (CEA Saclay)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 7

Type: **not specified**

Applying superconducting magnet technology for beam focusing magnetic field

Tuesday, 18 June 2019 16:00 (25 minutes)

Presenter: YAMAMOTO, Akira (KEK and CERN)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 8

Type: **not specified**

A Fast 1D Charge-conserving Particle-in-cell Code for the Modeling of Klystrons

Tuesday, 18 June 2019 17:30 (25 minutes)

Presenter: RAGUIN, Jean-Yves (PSI)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 9

Type: **not specified**

IOT as an energy efficient alternative

Wednesday, 19 June 2019 09:00 (25 minutes)

Summary

Presenter: MARRELLI, Chiara (ESS)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: **10**

Type: **not specified**

Long term experience from IOT operation in the SPS

Wednesday, 19 June 2019 09:30 (25 minutes)

Summary

Primary author: MONTESINOS, Eric (CERN)

Presenters: MONTESINOS, Eric (CERN); KILLING, Frederic (CERN)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 11

Type: **not specified**

Optimization of the HV pulse modulator

Wednesday, 19 June 2019 10:00 (25 minutes)

Presenter: MARTINS, Carlos (ESS)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 12

Type: **not specified**

Technical limits of vacuum tube efficiency -> optimum

Wednesday, 19 June 2019 11:00 (25 minutes)

Presenter: MARRELLI, Chiara (ESS)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 13

Type: **not specified**

Panel discussion: future of vacuum tubes

Wednesday, 19 June 2019 11:30 (1 hour)

Presenter: Dr JENSEN, Erk (CERN)

Session Classification: Energy Efficient Vacuum Tube Devices

Contribution ID: 14

Type: **not specified**

ESRF Experience with Solid-state Amplifiers and Combiners

Wednesday, 19 June 2019 14:00 (25 minutes)

Presenter: JACOB, Jörn (ESRF)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 15

Type: **not specified**

The new CERN solid state amplifier for the SPS / 200 MHz

Wednesday, 19 June 2019 14:30 (25 minutes)

Primary author: MONTESINOS, Eric (CERN)

Presenters: MONTESINOS, Eric (CERN); Dr JENSEN, Erk (CERN)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 16

Type: **not specified**

Long term operation experience from SOLEIL

Wednesday, 19 June 2019 15:00 (25 minutes)

Presenter: DIOP, Massamba (SOLEIL)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 17

Type: **not specified**

Doherty Architecture for Power Amplifiers

Wednesday, 19 June 2019 15:30 (25 minutes)

Presenter: CARRUBBA, Vincenzo

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: **18**

Type: **not specified**

Solid-state RF source with optimal efficiency for charging cavities

Wednesday, 19 June 2019 16:45 (15 minutes)

Presenter: Mr HOANG, Long (Uppsala)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 19

Type: **not specified**

Planar Single-ended Kilowatt-level VHF Class E Power Amplifier

Wednesday, 19 June 2019 17:05 (15 minutes)

Presenter: TONG, Renbin (Uppsala University)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 20

Type: **not specified**

The Eurostars ENEFRF Project

Wednesday, 19 June 2019 17:25 (15 minutes)

Presenter: DANCILA, Dragos (Uppsala University)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 21

Type: **not specified**

GaN Based High Power SSPAs with Ultrafast Dynamic Power Control

Thursday, 20 June 2019 09:00 (25 minutes)

Presenter: BENGTTSSON, Olof (Ferdinand Braun Institut)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 22

Type: **not specified**

Design and commissioning of the MYRRHA RFQ solid state amplifier

Thursday, 20 June 2019 09:30 (25 minutes)

Presenter: POMPON, Franck (SCK-CEN)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 23

Type: **not specified**

Technical limits of solid state efficiency -> optimum

Thursday, 20 June 2019 10:00 (25 minutes)

Presenter: TASKER, Paul (Cardiff University)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 24

Type: **not specified**

Panel discussion: future of solid state

Thursday, 20 June 2019 11:00 (1 hour)

Presenter: JACOB, Jorn (ESRF)

Session Classification: Energy Efficient Solid-state Devices

Contribution ID: 25

Type: **not specified**

Short Summary on Efficiency Aspects for Accelerators

Tuesday, 18 June 2019 13:25 (20 minutes)

Primary author: SEIDEL, Mike (PSI)

Presenter: SEIDEL, Mike (PSI)

Session Classification: Opening and Introduction Energy Efficiency

Contribution ID: 26

Type: **not specified**

Workshop Closing

Thursday, 20 June 2019 12:00 (5 minutes)

Presenter: DANCILA, Dragos (Uppsala University)

Session Classification: Energy Efficient Solid-state Devices