ICEC –CERN Project STELLA Kick-off Meeting "Re-engineering the Next Generation of Medical Linear Accelerators for Use in Challenging Environments"

Report of Contributions

Contribution ID: **2**   Type: **not specified**

Welcome from CERN Director –Mike Lamont

Wednesday 29 May 2024 08:30 (15 minutes)

Presenters: LAMONT, Mike (CERN); STAPNES, Steinar (CERN)

Session Classification: Session 1

Contribution ID: **3**
Type: **not specified**

When it all began –Ugo Amaldi

Wednesday 29 May 2024 08:45 (15 minutes)

Presenters: DOSANJH, Manjit (University of Oxford (GB)); AMALDI, Ugo (TERA Foundation (IT))

Session Classification: Session 1

Contribution ID: 4   Type: **not specified**

Introductions

Wednesday 29 May 2024 09:00 (15 minutes)

Presenters: O'BRIEN, Donna (ICEC); WENDLING, Eugenia

Session Classification: Session 1

Contribution ID: **6**   Type: **not specified**

Project STELLA History

Wednesday 29 May 2024 09:15 (10 minutes)

Presenter: DOSANJH, Manjit (University of Oxford (GB))

Session Classification: Session 1

Contribution ID: **10** Type: **not specified**

STELLA Project –Overview and Next Phase

Wednesday 29 May 2024 09:55 (15 minutes)

Presenters: WENDLING, Eugenia; DOSANJH, Manjit (University of Oxford (GB))

Session Classification: Session 1

Contribution ID: **11**　　　　　　　　　　　　　　　　　　Type: **not specified**

Panel discussion

Wednesday 29 May 2024 10:30 (1 hour)

Presenters:　PETERS, Chris (ICEC);　Dr KHADER, Jamal;　Dr DIAGNE, Magatte;　JENA, Rajesh (Univeristy of Cambridge);　GROVER, Surbhi (Upenn);　Dr SHOUMAN, Tarek

Session Classification:　Session 2

Contribution ID: **12** Type: **not specified**

International Organisational Perspective on RT and Gaps

Wednesday 29 May 2024 11:30 (10 minutes)

Presenter: Dr ABDEL-WAHAB, May

Session Classification: Session 2

Contribution ID: **13**　　　　　　　　　　　　　　　　　　Type: **not specified**

Overview and Key Challenges

Wednesday 29 May 2024 13:15 (7 minutes)

Presenter: STAPNES, Steinar (CERN)

Session Classification: Session 4

Contribution ID: **14**   Type: **not specified**

Overview of the ITAR Linac Design Study

Wednesday 29 May 2024 13:25 (12 minutes)

Presenter: BURT, Graeme Campbell (Lancaster University (GB))

Session Classification: Session 4

Contribution ID: **15**   Type: **not specified**

Imaging –Now in HICs

Wednesday 29 May 2024 13:40 (12 minutes)

Presenter: PETERS, Chris (ICEC)

Session Classification: Session 4

Contribution ID: **16**   Type: **not specified**

System Integration, Interfacing, and Infrastructure

Wednesday 29 May 2024 14:25 (12 minutes)

Presenter: WROE, Laurence Matthew (CERN)

Session Classification: Session 4

Contribution ID: **17**   Type: **not specified**

Overview and Key Challenges

Wednesday 29 May 2024 15:20 (10 minutes)

Presenter: JENA, Rajesh (Univeristy of Cambridge)

Session Classification: Session 5

Contribution ID: **18**   Type: **not specified**

Cascaded Machine Learning and Transformer Models

Wednesday 29 May 2024 15:30 (12 minutes)

Presenter: DU, Xin

Session Classification: Session 5

Contribution ID: **19**   Type: **not specified**

Background to the Capture of Fault Data from UK Linac Stock

Wednesday 29 May 2024 16:00 (12 minutes)

Presenter: BATEMAN, Joseph

Session Classification: Session 5

Contribution ID: **20**   Type: **not specified**

Requirements Capture to Speed Up Medical Device Certification and Route to Market

Wednesday 29 May 2024 16:30 (12 minutes)

Presenter: SPEARS, Bob (ICEC Business Advisor)

Session Classification: Session 5

Contribution ID: **21** Type: **not specified**

(Optional) Tour of the Synchrocyclotron

Wednesday 29 May 2024 17:30 (1 hour)

24 people capacity

Contribution ID: **22**   Type: **not specified**

Overview and Key Challenges

Thursday 30 May 2024 08:45 (5 minutes)

Presenter: WENDLING, Eugenia

Session Classification: Session 6

Contribution ID: **23**　　　　　　　　　　　　　　　　　Type: **not specified**

Training –IAEA Perspective

Thursday 30 May 2024 08:50 (5 minutes)

Presenter: Dr ABDEL-WAHAB, May

Session Classification: Session 6

Contribution ID: **24**   Type: **not specified**

CERN Training Resources and Collaborations

Thursday 30 May 2024 08:55 (5 minutes)

Presenter: STAPNES, Steinar (CERN)

Session Classification: Session 6

Contribution ID: **25**   Type: **not specified**

Lessons Learnt from South Africa Nationalization of Maintenance and Servicing

Presenter: BURT, Graeme Campbell (Lancaster University (GB))

Session Classification: Session 6

Contribution ID: **26**   Type: **not specified**

Overview and Key Challenges

Thursday 30 May 2024 10:45 (5 minutes)

Presenter: O'BRIEN, Donna (ICEC)

Session Classification: Session 7

Contribution ID: **27**　　　　　　　　　　　　　　　　　　Type: **not specified**

New Business models and Healthcare Utilities

Thursday 30 May 2024 11:10 (27 minutes)

Presenter:　Dr DREDGE, Carter (Cambridge University & SSM Health)

Session Classification:　Session 7

Contribution ID: **28**   Type: **not specified**

Role of CERN/KT

Thursday 30 May 2024 11:40 (12 minutes)

Presenters: FRISCH, Benjamin (CERN); MUHR, Sandra Elisabeth

Session Classification: Session 7

Contribution ID: **29**   Type: **not specified**

Feedback from Participants

Thursday 30 May 2024 13:30 (27 minutes)

Session Classification: Session 8

Contribution ID: **31**   Type: **not specified**

Ongoing, Continued Input and Involvement of LMICs

Thursday 30 May 2024 14:00 (27 minutes)

Session Classification: Session 8

Contribution ID: **33** Type: **not specified**

Session Summaries and Next Steps for Each Pillar

Thursday 30 May 2024 15:00 (27 minutes)

Presenters: DOSANJH, Manjit (University of Oxford (GB)); JENA, Rajesh (Univeristy of Cambridge); STAPNES, Steinar (CERN)

Session Classification: Session 9

Contribution ID: **34**   Type: **not specified**

Future Workshops

Thursday 30 May 2024 15:30 (7 minutes)

Presenters: O'BRIEN, Donna (ICEC);   STAPNES, Steinar (CERN)

Session Classification: Session 9

Contribution ID: **35**   Type: **not specified**

Beyond this Current STELLA Project

Thursday 30 May 2024 15:40 (20 minutes)

Presenters: FRISCH, Benjamin (CERN);   O'BRIEN, Donna (ICEC)

Session Classification: Session 9

Contribution ID: **36**   Type: **not specified**

Project STELLA –28 African Countries Survey

Wednesday 29 May 2024 09:25 (10 minutes)

Presenters: DOSANJH, Manjit (University of Oxford (GB)); IGE, Taofeeq Abdallah (University of Abuja, ABUJA. NIGERIA.)

Session Classification: Session 1

Contribution ID: **37**   Type: **not specified**

Project STELLA History –Summary of the Feb '23 'Desired STELLA Facility Workshop'

Wednesday 29 May 2024 09:35 (10 minutes)

Presenter: HASFORD, Francis

Session Classification: Session 1

Contribution ID: **38**   Type: **not specified**

Project STELLA History –Balkan and ART Studies

Wednesday 29 May 2024 09:45 (10 minutes)

Presenter: DOSANJH, Manjit (University of Oxford (GB))

Session Classification: Session 1

Contribution ID: **39** Type: **not specified**

Facilitated Discussion –Common Themes, Differences, and Challenges

Wednesday 29 May 2024 11:40 (20 minutes)

Presenters: DOSANJH, Manjit (University of Oxford (GB)); IGE, Taofeeq Abdallah (University of Abuja, ABUJA. NIGERIA.)

Session Classification: Session 2

Contribution ID: **40**   Type: **not specified**

Importance of STELLA −10 Year Reflection on the Journey

Wednesday 29 May 2024 13:00 (10 minutes)

Presenter: PISTENMAA, David

Session Classification: Session 3

Contribution ID: 41   Type: **not specified**

Brief Introduction of the Work Package Sessions and Deliverables

Wednesday 29 May 2024 13:10 (5 minutes)

Session Classification: Session 3

Contribution ID: **42**   Type: **not specified**

Imaging –Now in LMICs

Wednesday 29 May 2024 13:55 (12 minutes)

Presenter: Dr NGIGI, Ejidio

Session Classification: Session 4

Contribution ID: **43**　　　　　　　　　　　　　　　　Type: **not specified**

Imaging –In 10-15 Years

Wednesday 29 May 2024 14:10 (12 minutes)

Presenter:　BUCHSBAUM, Jeff

Session Classification:　Session 4

Contribution ID: 44   Type: **not specified**

Session Summary and Next Steps

Wednesday 29 May 2024 14:40 (5 minutes)

Presenter: STAPNES, Steinar (CERN)

Session Classification: Session 4

Contribution ID: 45   Type: **not specified**

Modelling, Learning From, and Predicting Fault Patterns in Linac Hardware

Wednesday 29 May 2024 16:15 (12 minutes)

Presenter: LEADLEY, Sam (University of Oxford)

Session Classification: Session 5

Contribution ID: 46   Type: **not specified**

State-of-the-Art in Federated Learning and Development of CERN's CAFEIN Platform for STELLA

Wednesday 29 May 2024 15:45 (12 minutes)

Presenters: REIS SANTOS, Diogo (CERN);   SERIO, Luigi (CERN)

Session Classification: Session 5

Contribution ID: 47   Type: **not specified**

Session Summary and Next Steps

Wednesday 29 May 2024 16:45 (5 minutes)

Presenter: JENA, Rajesh (Univeristy of Cambridge)

Session Classification: Session 5

Contribution ID: 48   Type: **not specified**

Training −KHCC Perspective

Thursday 30 May 2024 09:00 (5 minutes)

Presenter: Dr KHADER, Jamal

Session Classification: Session 6

Contribution ID: **49**   Type: **not specified**

Facilitated Discussion –Training Needs

Thursday 30 May 2024 09:05 (12 minutes)

Presenter: WENDLING, Eugenia

Session Classification: Session 6

Contribution ID: **50**   Type: **not specified**

Service and Maintenance –ITAR CDR

Thursday 30 May 2024 09:20 (12 minutes)

Presenter: BURT, Graeme Campbell (Lancaster University (GB))

Session Classification: Session 6

Contribution ID: 51   Type: **not specified**

Facilitated Discussion –Service and Maintenance

Thursday 30 May 2024 09:35 (35 minutes)

Presenters: CARRARA, Mauro (Fondazione IRCCS Istituto Nazionale Tumori Milano); STAPNES, Steinar (CERN)

Session Classification: Session 6

Contribution ID: **52**
Type: **not specified**

Session Summary and Next Steps

Thursday 30 May 2024 10:10 (5 minutes)

Presenters: WENDLING, Eugenia; BURT, Graeme Campbell (Lancaster University (GB))

Session Classification: Session 6

Contribution ID: **53**   Type: **not specified**

Market Dynamics –Need for a Disruptive Business Model

Thursday 30 May 2024 10:50 (17 minutes)

Presenters: Dr SPEARS, Bob (ICEC); O'BRIEN, Donna (ICEC)

Session Classification: Session 7

Contribution ID: **54**   Type: **not specified**

Spare (TBC)

Session Classification: Session 7

Contribution ID: **55**   Type: **not specified**

Facilitated Discussion –Business Model

Thursday 30 May 2024 11:55 (27 minutes)

Presenter: O'BRIEN, Donna (ICEC)

Session Classification: Session 7

Contribution ID: **56** Type: **not specified**

Session Summary and Next Steps

Thursday 30 May 2024 12:25 (5 minutes)

Presenter: O'BRIEN, Donna (ICEC)

Session Classification: Session 7

Contribution ID: **57**　　　　　　　　　　　　　　　　　　Type: **not specified**

Service and Maintenance from the LMIC Perspective

Thursday 30 May 2024 09:45 (12 minutes)

Presenter:　Dr BOUTAYEB, Salwa

Session Classification:　Session 6