

**USPAS Summer 2022:
Superconducting Accelerator
Magnets**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Unit 1: Course introduction

Monday, June 20, 2022 8:00 AM (15 minutes)

Presenter: FERRACIN, Paolo

Contribution ID: 2

Type: **not specified**

Unit 2: Main magnet specifications in circular accelerators

Monday, June 20, 2022 8:15 AM (1h 45m)

Presenter: TODESCO, ezio (CERN)

Contribution ID: 3

Type: **not specified**

Exercise set 1

Monday, June 20, 2022 10:00 AM (3h 30m)

Presenter: TODESCO, ezio (CERN)

Contribution ID: 4

Type: **not specified**

Unit 3: Field harmonics and specification of correctors

Tuesday, June 21, 2022 8:00 AM (1 hour)

Presenter: TODESCO, ezio (CERN)

Contribution ID: 5

Type: **not specified**

Unit 4: Magnetic design 1: How to create perfect fields with current lines

Tuesday, June 21, 2022 9:00 AM (1 hour)

Presenter: TODESCO, ezio (CERN)

Contribution ID: 6

Type: **not specified**

Exercise set 2

Tuesday, June 21, 2022 10:00 AM (3h 30m)

Presenter: TODESCO, ezio (CERN)

Contribution ID: 7

Type: **not specified**

Unit 5: Basics of superconductivity and applications I

Wednesday, June 22, 2022 8:00 AM (1 hour)

Presenter: MARTCHEVSKII, Maxim

Contribution ID: 8

Type: **not specified**

Unit 6: Basics of superconductivity and applications II

Wednesday, June 22, 2022 9:00 AM (1 hour)

Presenter: MARTCHEVSKII, Maxim

Contribution ID: 9

Type: **not specified**

Exercise set 3

Wednesday, June 22, 2022 10:00 AM (3h 30m)

Presenter: MARTCHEVSKII, Maxim

Contribution ID: 10

Type: **not specified**

Unit 7: Magnetic design 2: Short sample field, margins and sensitivities

Thursday, June 23, 2022 8:00 AM (1 hour)

Presenter: TODESCO, ezio (CERN)

Contribution ID: 11

Type: **not specified**

Unit 8: Magnetic design 3: Iron effect, grading techniques, and two-in-one dipoles

Thursday, June 23, 2022 9:00 AM (1 hour)

Presenter: TODESCO, ezio (CERN)

Contribution ID: 12

Type: **not specified**

Exercise set 4

Thursday, June 23, 2022 10:00 AM (3h 30m)

Presenter: TODESCO, ezio (CERN)

Contribution ID: 13

Type: **not specified**

Unit 9: Practical superconductors for accelerator magnets I

Friday, June 24, 2022 8:00 AM (1 hour)

Presenter: FERRACIN, Paolo

Contribution ID: 14

Type: **not specified**

Unit 10: Practical superconductors for accelerator magnets II

Friday, June 24, 2022 9:00 AM (1 hour)

Presenter: FERRACIN, Paolo

Contribution ID: 15

Type: **not specified**

Exercise set 5

Friday, June 24, 2022 10:00 AM (3h 30m)

Presenter: FERRACIN, Paolo

Contribution ID: 16

Type: **not specified**

Unit 11: Protection of superconducting accelerator magnets

Monday, June 27, 2022 8:00 AM (1 hour)

Presenter: MARTCHEVSKII, Maxim

Contribution ID: 17

Type: **not specified**

Unit 12: AC losses in superconductors

Monday, June 27, 2022 9:00 AM (1 hour)

Presenter: MARTCHEVSKII, Maxim

Contribution ID: **18**

Type: **not specified**

Exercise set 6

Monday, June 27, 2022 10:00 AM (3h 30m)

Presenter: MARTCHEVSKII, Maxim

Contribution ID: 19

Type: **not specified**

Unit 13: Lorentz forces and stresses in superconducting accelerator magnets I

Tuesday, June 28, 2022 8:00 AM (1 hour)

Presenter: FERRACIN, Paolo

Contribution ID: 20

Type: **not specified**

Unit 14: Lorentz forces and stresses in superconducting accelerator magnets I

Tuesday, June 28, 2022 9:00 AM (1 hour)

Presenter: FERRACIN, Paolo

Contribution ID: 21

Type: **not specified**

Exercise set 7

Tuesday, June 28, 2022 10:00 AM (3h 30m)

Presenter: FERRACIN, Paolo

Contribution ID: 22

Type: **not specified**

Unit 15: Construction methods and support structures I

Wednesday, June 29, 2022 8:00 AM (1 hour)

Presenter: FERRACIN, Paolo

Contribution ID: 23

Type: **not specified**

Unit 16: Construction methods and support structures II

Wednesday, June 29, 2022 9:00 AM (1 hour)

Presenter: FERRACIN, Paolo

Contribution ID: 24

Type: **not specified**

Exercise set 8

Wednesday, June 29, 2022 10:00 AM (3h 30m)

Presenter: FERRACIN, Paolo

Contribution ID: 25

Type: **not specified**

Unit 17: Degradation and training I

Thursday, June 30, 2022 8:00 AM (1 hour)

Presenter: FERRACIN, Paolo

Contribution ID: 26

Type: **not specified**

Unit 18: Degradation and training II

Thursday, June 30, 2022 9:00 AM (1 hour)

Presenter: FERRACIN, Paolo

Contribution ID: 27

Type: **not specified**

Exercise set 9

Thursday, June 30, 2022 10:00 AM (3h 30m)

Presenter: FERRACIN, Paolo

Contribution ID: 28

Type: **not specified**

Unit 19: Diagnostic and instrumentation I

Friday, July 1, 2022 8:00 AM (1 hour)

Presenter: MARTCHEVSKII, Maxim

Contribution ID: 29

Type: **not specified**

Unit 20: Diagnostic and instrumentation II

Friday, July 1, 2022 9:00 AM (1 hour)

Presenter: MARTCHEVSKII, Maxim

Contribution ID: **30**

Type: **not specified**

Close-out

Friday, July 1, 2022 10:00 AM (45 minutes)

Presenter: FERRACIN, Paolo