

**Particle Therapy MasterClass:
NISER, Jatni, Odisha, India**

Report of Contributions

Contribution ID: 5

Type: **not specified**

ENLIGHT Video: Virtual Particle Therapy Center

Saturday 9 April 2022 12:30 (30 minutes)

Video Link: <https://cern.nymus3d.nl/maps>

Contribution ID: 6

Type: **not specified**

Introduction to Particle Accelerators and its Applications in Medical Sciences.

Saturday 9 April 2022 10:10 (50 minutes)

Presenter: Dr KASHYAP, Varchaswi K S (NISER, Bhubaneswar)

Contribution ID: 7

Type: **not specified**

Introduction to Particle Therapy and its Status in India

Saturday 9 April 2022 11:35 (50 minutes)

Presenter: Mr MISHRA, Lalatendu (NISER, Bhubaneswar)

Contribution ID: 8

Type: **not specified**

Video: ENTERTVISION

Video Link: <https://videos.cern.ch/record/1541891>

Contribution ID: 9

Type: **not specified**

Video - MedAustron cancer treatment center, Austria

Saturday 9 April 2022 12:30 (30 minutes)

The MedAustron centre is a synchrotron based accelerator complex for cancer treatment and clinical and non-clinical research with protons and light ions, located in Wiener Neustadt, Austria.

Contribution ID: **10**

Type: **not specified**

Hands-on session - Matrad

Saturday 9 April 2022 15:30 (1h 30m)

Presenter: Dr TAMBAVE, Ganesh (NISER, Bhubaneswar)

Contribution ID: **11**

Type: **not specified**

Virtual Visit

Particle accelerator: <https://youtu.be/DtOsEPwtSkQ>

Tumor therapy: <https://youtu.be/2KUzT7YZzTA>

HIT: https://youtu.be/Fw9H_hceNLA

FAIR: <https://youtu.be/N48YCJli1lo>

3 Years in 3 Min FAIR: <https://youtu.be/x0RTwqaRock>

Biological modeling: <https://youtu.be/azVNWptPA40>

As an alternative to a visit to a local lab or experiment, videos can be used (see the link below)

Animations Link:

<https://indico.cern.ch/event/840212/page/18000-animations>

Contribution ID: 12

Type: **not specified**

Introduction to matRad software and related exercises

Saturday 9 April 2022 15:00 (30 minutes)

MatRAD is an open source software tool for designing radiation therapy plans with a modulated beam of photons, protons and carbon ions. It is designed only for research and educational purposes. More information can be obtained from

(1) <https://www.mathworks.com/company/newsletters/articles/developing-matrad-an-open-source-dose-calculation-and-optimization-toolkit-for-radiation-therapy-planning.html>

(2) <https://github.com/e0404/matRad/wiki>

Presenter: Dr TAMBAVE, Ganesh (NISER, Bhubaneswar)

Contribution ID: **13**

Type: **not specified**

Video Conference

Saturday 9 April 2022 19:30 (1 hour)

Common Video Conference

Contribution ID: 14

Type: **not specified**

Videos - Particle accelerator and applications

Saturday 9 April 2022 11:00 (20 minutes)

Large Hadron Collider, Geneva, Switzerland and applications of Particle accelerators.

Contribution ID: 15

Type: **not specified**

Discussion and Quiz

Saturday 9 April 2022 17:15 (15 minutes)

<https://kahoot.it/>

Contribution ID: 16

Type: **not specified**

Introduction to Particle Therapy MasterClass (PTMC)

Saturday 9 April 2022 14:30 (30 minutes)

Presenter: Dr FOKA, Yiota (CERN)

Contribution ID: 17

Type: **not specified**

Welcome to PTMC

Saturday 9 April 2022 10:05 (5 minutes)

Presenter: Prof. MOHANTY, Bedangadas (NISER Bhubaneswar)

Contribution ID: **18**

Type: **not specified**

Video - Apollo Proton Cancer Centre in Chennai, India

Saturday 9 April 2022 12:30 (30 minutes)

<https://proton.apollohospitals.com/>