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UNIVERSITY

FACULTY OF SCIENCES

DEPARTMENT OF PHYSICS AND ASTRONOMY
UGCT RADIATION PHYSICS

DOCTORAL SCHOOL 2021

Introduction to computed X-ray tomography – Jaianth Vijayakumar

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Flanders
State of the Art

UGCT

WELCOME

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ABOUT THIS COURSE

- Overview on micro - X-ray tomography
  - Experimental aspects
    - Applications
    - Modalities of X-ray tomography
  - Reconstruction
  - Data analysis
  - Measure and analyze sample

ADMINISTRATION

- Attendance – to be signed each day
- Information on the invoicing for external people
- Feedback form: Link

Course website: Link

Poster link: Link

Microsoft Teams link: Link

Password : mct_is_awesome_2021

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DATA ANALYSIS

- VGStudio – Prof. Matthieu Bonne
  - my VGL
  - Example file (importing tiff file in myvgl not possible)
- Octopus – Stefanie van Overmier
- Avizio – Asim Siddique
- Python + imageJ – Jaianth Vijayakumar

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DATA ANALYSIS

	Python/imageJ/ Paraview	VGStudio	Octopus	Avizio
Computer	Carried out on your computer	1/2 computers at UGCT	1/2 computers at UGCT	2 computers at Campus Sterre
Remote access	Anywhere	Only with UGCT account	Only with UGCT account	Not possible
Availability	Opensource	Expensive ++	Expensive +	Expensive ++
Speed/GPU requirement	With/without GPU – may be slow	Has GPU - faster	Has GPU - faster	Has GPU faster
Data analysis	Suitable for complex analysis	May be	May be	May be
3D volume analysis	Volume analysis can be tricky	Volume analysis possible	Volume analysis possible	Volume analysis

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LAB TOUR

- Split into 3 groups
- Online attendees will be provided with a prerecorded video
- Photos in LinkedIn: Link
- Group photo before sandwich 11.10.2021

Any Questions?

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Jaianth Vijayakumar

Postdoc

UGCT – RADIATION PHYSICS GROUP

E jaianth.vijayakumar@ugent.be

Ghent University

@ugent

Ghent University

www.ugent.be

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