

MSE-663

**Powder Diffraction School - Modern Synchrotron Methods**

Casati Nicola, Various lecturers

<b>Cursus</b>	<b>Sem.</b>	<b>Type</b>
Materials Science and Engineering		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Oral
Workload	60h
<b>Hours</b>	<b>34</b>
Courses	23
Exercises	9
TP	2
<b>Number of positions</b>	<b>40</b>

**Frequency**

Every 2 years

**Summary**

Modern synchrotron-radiation methods not only provide data of exceptional quality, but have allowed previously inaccessible experiments to be performed. The school will give a broad overview of all possibilities using synchrotron radiation, including hands-on practicals.

**Content**

[https://www.epfl.ch/research/domains/ccmx/courses-and-events/pds2020/?mc\\_cid=186eab633f&mc\\_eid=1f0a525ce4](https://www.epfl.ch/research/domains/ccmx/courses-and-events/pds2020/?mc_cid=186eab633f&mc_eid=1f0a525ce4)

**Keywords**

powder diffraction, x-rays, neutron diffraction

**Learning Prerequisites****Important concepts to start the course**

Participants are supposed to be already familiar with both the fundamentals of crystallography and X-ray powder diffraction.

**Assessment methods**

Oral discussion with tutors, participants will also be asked to present a poster

**Resources****Websites**

- [https://www.epfl.ch/research/domains/ccmx/courses-and-events/pds2020/?mc\\_cid=186eab633f&mc\\_eid=1f0a525ce4](https://www.epfl.ch/research/domains/ccmx/courses-and-events/pds2020/?mc_cid=186eab633f&mc_eid=1f0a525ce4)