

## Tentative program for the AMPERE Summer School on Biological Solid-State NMR

The AMPERE Summer School for Biological Solid-State NMR consists of an online part running in the spring of 2023 and a physical part taking place in early June in Aarhus, Denmark.

The online part of the workshop will be co-organised with the PANACEA H2020 EU project to broaden the knowledge on solid-state NMR for chemists.

### Online program

Date	Topic	Lecturer
1	06/Mar <b>Quantum mechanics</b>	Meier/Ernst
2	13/Mar <b>Anisotropic Interactions and MAS</b>	Meier/Ernst
3	20/Mar Exercises	
4	27/Mar <b>Quadrupolar nuclei</b>	Kentgens
5	03/Apr Exercises 10/Apr 17/Apr	
6	24/Apr <b>Product operators</b>	Oschkinat
7	01/May <b>Linewidths and relaxation</b>	Ernst/Meier
8	08/May Exercises	
9	15/May <b>Numerical simulations</b>	Vosegaard
10	22/May Exercises	
11	29/May <b>The Challenges of Modern Structural Biology</b>	de Groot

## Physical part - Biological solid-state NMR June 4-9

	Sunday 4 June 2023	Monday 5 June 2023	Tuesday 6 June 2023	Wednesday 7 June 2023	Thursday 8 June 2023	Friday 8 June 2023
9:00-10:30		NMR Theory  Meier	Product operators  Oschkinat	Probes  Engelke	Fast MAS / 1H detection  Reif	See below
10:30-11:00		<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	
11:00-12:30		De-/Recoupling theory  Ernst	New hardware  Wegner	Assignment  Böckmann / Higman	Sample preparation  Böckmann	
12:30-14:00		<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
14:00-15:30		De-/Recoupling experiments  Nielsen	Protein solid-state NMR exps  Oschkinat	Assignment exercises  Böckmann / Higman	DNP intro  Griffin	In cell MAS NMR  Baldus
15:30-16:00		<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Closing</i>
16:00-17:30		SIMPSON exercises  Vosegaard / Nielsen	Poster pitch #1  Ernst	Poster pitch #2  Baldus	Structures  Oschkinat / Meier	
17:30-18:00	Welcome mixer	Questions	Posters	Posters	Posters	

### Friday morning

9:00-10:00	Dynamics  Reif
10:00-10:15	<i>Coffee</i>
10:15-11:00	iNANO lecture: DNP  Griffin
11:00-11:15	<i>Break</i>
11:15-12:30	Structure calc  Higman