

Programme EMBO course NMR Basel 2022

	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	5.8.	6.8.	7.8.	8.8.	9.8.	10.8.	11.8.	12.8.
09:00		L5 Deuteration and isotope labeling methods, <u>Nietlispach</u>	L8 Ligand binding, isotope filters, <u>Mott</u>	L11 RDCs, Dynamics, <u>Blackledge</u>	L13 Cross correlated relaxation, RDC dynamics and fast kinetics, <u>Griesinger</u>	L14 In cell NMR, <u>Banci + Izadi-Pruneyre</u>	L16 Membrane proteins and integrated structural biology, <u>Hiller</u>	L18 Structure Validation, <u>Vuister</u>
10:15		<i>Coffee (base room 02.001)</i>	<i>Coffee (base room 02.001)</i>	<i>Group Foto Coffee (base room 02.001)</i>	<i>Coffee (base room 02.001)</i>	<i>Coffee (base room 02.001)</i>	<i>Coffee (base room 02.001)</i>	<i>Coffee (base room 02.001)</i>
10:45		L6 NMR structure calculation, <u>Nilges</u>	L9 Relaxation + RDCs, <u>Grzesiek, Tjandra</u>	L12 NMR exchange techniques, <u>Jensen</u>	Meet instructors and tutors with your data and questions	L15 NMR structure calculation, <u>Guentert</u>	L17 Large proteins, <u>Riek</u>	Practical P11 Structure validation
12:00		<i>Lunch (Biozentrum Mensa)</i>	<i>Lunch (Biozentrum Mensa)</i>	<i>Lunch (Biozentrum Mensa)</i>	<i>Lunch boxes</i>	<i>Lunch (Biozentrum Mensa)</i>	<i>Lunch (Biozentrum Mensa)</i>	<i>Sandwich lunch</i>
13:30	Introduction Presentation of participants forming of groups	Practicals P1 NMR Basics (G1a-e) P3 CCPN (G2)	Practicals P2 NMR Triple Resonance (G1a-e) P4 NMRpipe (G2)	Practicals P7 Relaxation: practical NMR (G1) P8 Relaxation/RDC: data analysis (G2)	Excursion Hike	Practicals P5 Aria (G1) P6 Cyana (G2) optional free choice	13:00-15:00 Practicals P12-P25	
	14:30-15:45 L1 Past+Future of NMR, <u>Griesinger</u>							
16:00	<i>Coffee (base room 02.001)</i>	<i>Coffee (base room 02.001)</i>	<i>Coffee (base room 02.001)</i>	<i>Coffee (base room 02.001)</i>		<i>Coffee (base room 02.001)</i>	15:00-15:30 <i>Coffee (base room 02.001)</i>	
16:30	16:15-17:30 L2 Heteron. NMR, <u>Sattler</u> 17:45-19:00 L3 phase cycling, gradients, <u>Nietlispach</u>	Practicals P1 NMR Basics (G2a-e) P4 NMRPipe (G1)	Practicals P2 NMR Triple Resonance (G2a-e) P3 CCPN (G1)	Practicals P7 Relaxation: practical NMR (G2) P8 Relaxation/RDC: data analysis (G1)		Practicals P5 Aria (G2) P6 Cyana (G1) optional free choice	15:30-17:30 Practicals P12-P25	
19:00	<i>Dinner (Catering, Biozentrum Mensa)</i>	<i>Dinner (Biozentrum Mensa)</i>	<i>Dinner (Catering, Biozentrum Mensa)</i>	<i>Dinner (Biozentrum Mensa)</i>	Free		17:30 Round Table	
20:00	L4 (ISMAR lecture) Data processing, <u>Delaglio</u>	L7 NMR of nucleic acids, <u>Petzold</u>	L10 J-couplings, <u>Vuister</u>	Practicals P9 Relaxation/RDC software (G1) P10 Talos, MFR, RDC software (G2)	Free	Practicals P12-P25	Course Dinner Restaurant 1777 Im Schmiedehof 10 Leave 19:00	
21:15	Poster Session with drinks+snacks	Poster Session with drinks+snacks	Poster Session with drinks+snacks	Practicals P9 Relaxation/RDC software (G2) P10 Talos, MFR, RDC software (G1)	Free			

Practicals done by all

Nr	Description	Instructors	Room	Day	Time	Group	Duration
P1a	NMR basics: heteronuclear pulse calibration, proton T2, etc.	Tjandra, Schütz, Petrovic	AVIII 600 RT (Biozentrum)	Sat	13:30 16:30	G1a G2a	2:30
P1b		Sattler, Habazettl	AVIII 600 cryo (Biozentrum)	Sat	13:30 16:30	G1b G2b	2:30
P1c		Hiller, Mas, Griesinger	AVIII 700 cryo (Biozentrum)	Sat	13:30 16:30	G1c G2c	2:30
P1d		Simon, Muentener	AVNeo 800 cryo (Biozentrum)	Sat	13:30 16:30	G1d G2d	2:30
P1e		Nietispach, Häussinger	AVIII 600 RT (Chemie)	Sat	13:30 16:30	G1e G2e	2:30
P2a	NMR triple resonance: exp setup, acquisition times, deuteration, cryoprobe etc.	Tjandra, Schütz, Petrovic	AVIII 600 RT (Biozentrum)	Sun	13:30 16:30	G1a G2a	2:30
P2b		Sattler, Habazettl	AVIII 600 cryo (Biozentrum)	Sun	13:30 16:30	G1b G2b	2:30
P2c		Hiller, Mas, Griesinger	AVIII 700 cryo (Biozentrum)	Sun	13:30 16:30	G1c G2c	2:30
P2d		Simon, Muentener	AVNeo 800 cryo (Biozentrum)	Sun	13:30 16:30	G1d G2d	2:30
P2e		Nietispach, Häussinger	AVIII 600 RT (Chemie)	Sun	13:30 16:30	G1e G2e	2:30
P3	ANALYSIS/CCPN [AZARA?]	Mott, Morgan Hayward	Kiwi	Sat Sun	13:30 16:30	G2 G1	
P4	NMRPipe processing	Delaglio, Habazettl, Vuister	Mango	Sat Sun	16:30 13:30	G2 G1	2:30
P5	ARIA/CNS	Nilges, Mallavin	Mango	Wed Wed	13:30 16:30	G1 G2	2:30
P6	CYANA	Güntert	Kiwi	Wed Wed	13:30 16:30	G2 G1	2:30
P7	Relaxation: practical NMR	Grzesiek/Jensen	AVIII 600	Mon Mon	13:30 16:30	G1 G2	2:30
P8	RDCs, relaxation: data analysis	Tjandra	Kiwi	Mon Mon	13:30 16:30	G2 G1	2:30
P9	RDCs, 15N relaxation software MODULE, TENSOR	Blackledge	Kiwi	Mon Mon	20:00 21:15	G1 G2	1:15
P10	TALOS, RDCs, MFR	Delaglio	Mango	Mon Mon	20:00 21:15	G2 G1	1:15
P11	Structure validation	Vuister	Kiwi+Mango	Fri	10:45	G1+G2	1:30

P1-P11 done by all
P12-P25 optional 3 out of 14

Rooms and locations	Responsible
NMR:	
AVIIHD 600 RT (Biozentrum, NMR600_2) TopSpin 3.6.2	Muentener/Mas/Habazettl thomas.muentener@unibas.ch, ++41 61 207 2263 guillaume.mas@unibas.ch, ++41 61 207 7365
AVIII 600 cryo (Biozentrum, nmr600_3) TopSpin 3.6.2	j.habazettl@unibas.ch, ++41 61 207 7285XXX
AVIII 700 cryo (Biozentrum) TopSpin 3.6.2	
AVNeo 800 cryo (Biozentrum) TopSpin 4.1.X, multireceiver	
AVIII 600 RT (Chemie) TopSpin 3.5pl6/TopSpin 3.6.0	Häussinger daniel.haessinger@unibas.ch, ++41 61 207 1159
Computer rooms:	
Kiwi 02.067 20 PCs Xubuntu 18.04	Muentener/Mazur thomas.muentener@unibas.ch, ++41 61 207 2249
Mango 02.081 20 Xubuntu 18.04	adam.mazur@unibas.ch, ++41 61 207 2183
Cherry (Pharmazentrum) 21 Mac OS Big Sur	

Free-choice practicals

Nr	Description	Instructors	Room	Day	Time	Group	Duration	Requires
P12	Haddock	Mott	Kiwi	Wed Thu	TBD	free choice	2:00	Real computer
P13	NMR exchange techniques	Jensen	Mango	Wed Thu	TBD	free choice	2:00	Real computer
P14	13C-detected experiments	Schiavina, Kuemmerle	NMR800	Wed Thu	TBD	free choice	2:00	NMR
P15	Practical aspects of in-cell NMR	Banci, Izadi-Pruneyre	Seminar room 02.054	Wed Thu	TBD	free choice	2:00	Seminar room
P16	Build HNCO pulse sequence from scratch	Grzesiek, Tjandra	NMR600_2/3	Wed Thu	TBD	free choice	2:00	NMR
P17	RDC media	Grzesiek	NMR600_2	Wed Thu	TBD	free choice	2:00	NMR
P18	Advanced NMR (large proteins)	Riek	NMR900	Wed Thu	TBD	free choice	2:00	NMR
P19	APSY-NMR	Hiller, Muentener	NMR700	Wed Thu	TBD	free choice	2:00	NMR
P20	PCS	Häussinger	Seminar room Lemon	Wed Thu	TBD	free choice	2:00	Seminar room
P21	Practical aspects of methyl NMR for large proteins	Schuetz, Mas	Computer room TBD	Wed Thu	TBD	free choice	2:00	Real computer
P22	Sparky	Jonker	Computer room TBD	Wed Thu	TBD	free choice	2:00	WeNMR
P23	Structure Calculation RNA using the WeNMR portal	Jonker	Computer room TBD	Wed Thu	TBD	free choice	2:00	WeNMR
P24	Structure calculation/domain arrangements with RDCs/PREs in ARIA	Simon	Computer room TBD	Wed Thu	TBD	free choice	2:00	NMRBox
P25	Practical aspects of weighted sampling	Simon	Computer room TBD	Wed Thu	TBD	free choice	2:00	NMRBox