

Programme EMBO 2015 BNMRZ, Garching

	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	
	31.7.	1.8.	2.8.	3.8.	4.8.	5.8.	6.8.	7.8.	
09:00		J-couplings, <u>Vuister</u>	NMR structure calculation, <u>Nilges</u>	Deuteration, <u>Nietlispach</u>	Cross correlated relaxation <u>Griesinger</u>	Direct X detect., paramagn. NMR <u>Felli</u>	Large proteins, <u>Riek</u>	Structure Validation, <u>Vuister</u>	
10:15		<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	
10:45		RDCs, Dynamics, <u>Salmon</u>	NMR structure calculation, <u>Güntert</u>	NMR of nucleic acids, <u>Petzold</u>	Meet instructors and tutors with your data and questions	RDC/Relaxation, <u>Grzesiek, Tjandra</u>	Solid-state NMR <u>Reif</u>	Practical P11 Structure validation	
12:00		<i>Lunch</i>	Group Photo <i>Lunch</i>	<i>Lunch (Mensa)</i>		<i>Lunch (Mensa)</i>	<i>Lunch (Mensa)</i>	<i>Lunch (Mensa)</i>	
13:30	Introduction Presentation of participants forming of groups	Practicals P1, P3	Practicals P1, P3	Practicals P5, P6	Excursion Lunch boxes Kloster Andechs	Practicals P7, P8	13:00-15:00 Practicals P12-P22		
	14:30-15:45 Past+Future of NMR, <u>Griesinger</u>								
16:00	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>			<i>Coffee</i>	15:00-15:30 <i>Coffee</i>	
16:30	Heteron. NMR: 16:15-17:30 basics, <u>Sattler</u> 17:45-19:00 phase cycle, gradients, <u>Nietlispach</u>	Practicals P2, P4	Practicals P2, P4	Practicals P5, P6		Practicals P7, P8	15:30-17:30 Practicals P12-P22		
19:00	<i>Dinner</i>	<i>Dinner</i>	<i>Dinner</i>	<i>Dinner</i>	Free	<i>Dinner</i>	17:30 Round Table		
20:15	Data processing, <u>Delaglio</u>	20:00 Practicals P9, P10	Ligand binding, isotope filters, <u>Mott</u>	PREs <u>Madl</u>			Practicals P12-P22	Course Dinner Hofbräukeller Leave 19:00	
21:15	Poster Session with drinks+snacks	21:15 Practicals P9, P10	Posters, drinks+snacks	Posters, drinks+snacks					

Practicals EMBO 2015, BNMRZ, Garching

	Description	Instructors	Room	Day	Time	# group	duration
P1a	NMR basics: heteronuclear pulse calibration, proton T2, etc.	Asami, Griesinger	AVIII 750 (Hardy)	Sat Sun	13:30 13:30	1	2:30
P1b		Simon, Warner	AVIII 600 cryo (Pat)	Sat Sun	13:30 13:30	1	2:30
P1c		Madl Nietlispach, Felli	AVIII 600 (Laurel)	Sat Sun	13:30 13:30	1	2:30
P1d		Gemmecker, Tjandra	AVIII 500 cryo (Purzel)	Sat Sun	13:30 13:30	1	2:30
P2a	NMR triple resonance: exp setup, acquisition times, deuteration, cryoprobe etc.	Asami, Griesinger	AVIII 750 (Hardy)	Sat Sun	16:30 16:30	1	2:30
P2b		Simon, Warner	AVIII 600 cryo (Pat)	Sat Sun	16:30 16:30	1	2:30
P2c		Madl Nietlispach, Felli	AVIII 600 (Laurel)	Sat Sun	16:30 16:30	1	2:30
P2d		Gemmecker, Tjandra	AVIII 500 cryo (Purzel)	Sat Sun	16:30 16:30	1	2:30
P3	ANALYSIS/CCPN	Mott, Warner	CIP1+CIP2	Sat Sun	13:30 13:30	4	
P4	NMRPipe processing	Delaglio Vuister, Dames	CIP1+CIP2	Sat Sun	16:30 16:30	4	2:30
P5	ARIA/CNS	Nilges, Malliavin	CIP1	Mon	13:30 16:30	4	2:30
P6	CYANA	Güntert	CIP2	Mon	13:30 16:30	4	2:30
P7	RDCs: practical NMR	Grzesiek	AVIII 600 (Laurel)	Wed	13:30 16:30	4	2:30
P8	RDCs, 15N relaxation: data analysis	Tjandra	CIP1+CIP2	Wed	13:30 16:30	4	2:30
P9	RDCs, MODULE	Salmon	CIP1	Sat	20:15 21:15	4	1:15
P10	TALOS, RDCs, MFR	Delaglio	CIP2	Sat	20:15 21:15	4	1:15
P11	Structure validation, CCPN	Vuister, Gutmanas	CIP1+CIP2	Fri	10:45	8	1:30
P12	Sparky	Jonker	PCC	Thu2	15:30-17:30		2:00
P13	Structure Calculation RNA	Jonker	PCC	Wed	20:15-22:15		2:00
P14	NMRView	Dames	CIP1	Thu1	13:00-15:00		2:00
P15	Haddock	Mott	CIP2	Thu2	15:30-17:30		2:00
P16	Structure calculations with unusual ligands	Habazettl	CIP1	Thu2	15:30-17:30		2:00
P17	Build HNC0 pulse sequence from scratch	Grzesiek, Tjandra	AVIII 500 cryo (Purzel)	Wed Thu2	20:15-22:15 15:30-17:30		2:00
P18	Advanced NMR of large proteins	Riek	AVIII 900 cryo (Chef)	Wed Thu1 Thu2	20:15-22:15 13:00-15:00 15:30-17:30		2:00
P19	PREs	Simon, Madl, Warner	CIP2	Thu1	13:00-15:00		2:00
P20	Solid-state NMR	Reif, Sarkar	WB AVIII 400	Thu	15:30-17:30		2:00
P21	Relaxation dispersion	Asami (CPMG), Petzold (T1rho)	Room 53106	Wed	20:15-22:15		2:00
P22	13C detected NMR experiments	Felli	AVIII 600 cryo (Pat)	Thu1 Thu2	13:00-15:00 15:30-17:30		2:00

Rooms and locatio	Practicals
NMR:	
AVIII 750 (Hardy)	P1, P2
AVIII 600 cryo (Pat)	P1, P2
AVIII 600 (Laurel)	P1, P2, P7
AVIII 500 cryo (Purzel)	P1, P2, P17
AVI 900 cryo (Chef)	P1, P2, P18

Computer practicals/seminars	
CIP1	ground level (green) computer teaching lab
CIP2	
PCC	room 43307 (yellow)
Room 53106	Seminar Room 53106 (yellow)
Lecture room 22209	ground level (green)

Contact/help:	
Rainer Haessner	rainer.haessner@tum.de
Gerd Gemmecker	gerd.gemmecker@tum.de
Sam Asami	sam.asami@tum.de
Michael Sattler	michael.sattler@tum.de

Practical Schedule per Group

	Saturday				Sunday		Monday		Wednesday		Thursday			Friday
Start	13:30	16:30	20:00	21:15	13:30	16:30	13:30	16:30	13:30	16:30	20:15	13:00	15:30	10:45
End	16:00	19:00	21:15	22:30	16:00	19:00	16:00	19:00	16:00	19:00	22:15	15:00	17:30	12:15
G1-G4	P1a-P1d	P2a-P2d	P9	P10	P3	P4	P5	P6	P7	P8	P12-P22	P12-P22	P12-P22	P11
G5-G8	P3	P4	P10	P9	P1a-P1d	P2a-P2d	P6	P5	P8	P7				

G1-G8 groups of 3-4 students, assigned on Friday based on questionnaire/info on knowledge

Optional practicals (P12-P22)

will be assigned based on your choices during the first days of the course